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ORIGINAL COMMUNICATIONS.

Two cases of Lithontripsy, by the late GEO. McCLELLAN, M. D.
Reported by his son, J. H. B. McCLELLAN, M. D., from notes
taken at the time by E. R. MAYER, M. D.

Mr. Miller, æt. 22, of Kingston, Canada, carpenter by trade, came to Dr. McClellan, May 10th, 1843, suffering from a very large calculus in the bladder. He attributed its formation to his having, a few years ago, mischievously put a kidney bean into the urethra. After its insertion he forgot the circumstance, and thinks it must have worked its way into the bladder.

Upon sounding him, the stone appeared to be hard and very large. He has never passed any particles. Mr. M. is a very nervous and timid man, and has taken a great deal of opium to relieve the pain. He has a great horror of cutting, and wishes to be relieved, if possible, by the crushing operation. Under these circumstances, Dr. McC. consented to use the lithontriptic instruments, which, he remarked, are more painful than cutting instruments, though less dangerous, and are more applicable to old age.

Some difficulty was apprehended, from Mr. Miller's extreme irritability—he cannot urinate in the erect position, without, at the

same time, discharging his fæces, a common occurrence with those having calculi, owing to the tenesmus from the irritability of the bladder.

May 11th. Introduced a small Jacobson instrument, but found that it did not catch the stone readily. Finding the urethra sufficiently large, he introduced a larger one of Heurteloup's, with which he immediately caught the stone. (No positive rule can be laid down in regard to the choice of these instruments; sometimes one being applicable, sometimes the other.) By five or six efforts he succeeded in reducing a portion of the stone (which must have been three inches in diameter) into a number of fragments. It was hard, and apparently shelled off in strata. The patient bore the operation very well, suffering only from the irritability of the bladder, which occasionally contracted and ejected the urine.

Notwithstanding the utmost care, the Dr. could not disengage a few fragments from between the blades, and although the instrument could be readily introduced, he had to use some gentle force in withdrawing it, a common and sometimes unavoidable occurrence in this operation. After the operation, an opiate was administered, and he was directed to drink freely of an infusion of *Erigeron Philadelphicum*.

May 12th. Repeated the operation with a small Heurteloup's instrument, and crushed several large fragments. The patient rather more irritable, from pain in the bladder and urethra. Passed a few fragments, and amongst them a piece a third of an inch in diameter in one direction.

It will require a number of operations to crush the stone entirely, and even when crushed, it will probably require a long time to effect a cure, the patient not being able at present to discharge his water in an upright position.

May 15th. Repeated the operation, and crushed a large fragment.

May 17th and 19th. Notwithstanding all difficulties, crushed several large fragments. Quantities of small grit, and some large pieces have come away, giving him, as yet, but little pain.

Nitro-muriatic acid being administered, in a few days greatly cleared and made neutral his urine, which before abounded in sediment, and was strongly ammoniacal. He is still taking the erigeron, with a little morphia. The calculus is white, stratified,

and pretty hard; and I have ascertained it to be the triple phosphate of magnesia, ammonia and lime.

May 20th. Repeated the crushing. His urethra and bladder were less irritable than before; very little pain was produced, and no blood discharged as in previous instances. On this occasion, the Dr. seized the stone by its long diameter, and apparently broke it into several fragments, while in the previous attempts he had merely chipped off small pieces; the stone being so large as to prevent the whole of it being engaged in the instrument at once. The patient is less irritable, passes his urine more readily in a position inclining to the erect, and without discharging his fæces; while the expulsion of the fragments through his urethra is attended with much less pain, and proceeds quite rapidly.

May 21st. Operation repeated.

May 22d. Used Jacobson's small instrument in order to comminute some of the smaller fragments. Each time the instrument is removed, it is clogged up with gritty particles, and is with difficulty drawn from the meatus. In this way alone, quite a quantity of the stone has been withdrawn from the bladder. The patient has become accustomed to the use of the instrument, his urethra and bladder are less irritable, and he suffers but little pain during the operation, and generally, except during the expulsion of the fragments.

June 1st. By repeated operations the calculus is at length reduced to a comparatively small size. During the past week he has voided with his urine over 3ij. of fragments, most of them larger than a pea, and some still larger. Owing to imprudence in diet, and other causes, he has been seized during this time with bilious vomiting, hiccough, and other unpleasant symptoms, which were checked, however, by the exhibition of hydrar. chloridi mit. gr. xxv., and the general irritability of his system thus dissipated. The Dr. succeeded this morning, with a middle sized Heurteloup's instrument, in grasping the stone and breaking off some large pieces. Deeming, from the increased resistance he experienced, that he had seized the nucleus of the stone, the Dr. continued turning the screw, when suddenly a loud crack was heard, caused by the breaking of the inner blade of the instrument.

The accident excited no alarm, however, as it will probably be

passed by the urethra. On three occasions this has happened to Dr. McC., with this result.

June 3d. Repeated the operation, and crushed a large quantity, without, however, coming in contact with the broken blade. A piece of stone lodged high up in the meatus, which, however, did not interfere with his urination.

June 5th. In discharging his fæces, a piece of the calculus came out and lodged in the urethra, about an inch behind the corona glandis. The piece was large, angular, and defied all attempts to dislodge it with the polypus forceps; nor could it have been extricated without lacerating the urethra to a great degree. The Dr. therefore cut down upon it through the corpus spongiosum, and readily removed it.

June 19th. Since the last date the Dr. has operated two or three times, and there remain but few pieces of any size. A large quantity of detritus can be felt by the catheter in the bas-fond of the bladder.

Every day he passes small fragments, and a good deal of this detritus. The larger pieces are extruded without inconvenience through the fistulous opening in the lower part of the penis—which has been kept open, there being no danger of infiltration. His general health is the same, while he appears less irritable, and expresses his consciousness of relief, and of a diminution of the heavy, oppressive feeling produced by the calculus. The blade of the lithotrite still remains.

He still continues the use of erigeron tea, nitro-muriatic acid, opium, &c.

June 28th. Repeated the operation, and crushed the remaining pieces of any size. The patient was directed to sit up, and discharge his urine in the erect position. (He had been frequently urged to do this before, but always positively refused, asserting the impossibility of the attempt, and evincing considerable nervousness and irritability.) This time, however, he assented, and after many attempts to discharge his urine, which were ineffectual on account of his fear and conviction of the impossibility of the attempt, he succeeded at last in producing a full stream, containing about a handful of small fragments; and followed by the broken blade, which was extruded without much effort or pain. It was much rusted, but showed no appearance of concretions upon it. Upon

sounding him, it was ascertained that but little of the stone remained, and that, probably, in a state of extreme division.

The patient is much relieved, and expresses strong hopes of recovery.

July 19th. The patient during the past weeks has been passing very fine detritus. Expresses himself entirely free from pain, and believes there is no foreign substance in his bladder. He urinates readily; either standing or sitting; is very much emaciated, however, and reduced almost to a skeleton. A week or two ago he was attacked with diarrhœa, pain in the breast, and profuse expectoration, so much so that phthisis was feared as a very natural consequence of his present condition. He is, however, gradually recovering.

August 25th. The Dr., since the last date, has crushed two or three small fragments, and the patient is now in good condition. He enjoys good appetite, and has not suffered from the least symptoms of stone for the last few weeks. He urinates in the erect position, and his urine is healthy and limpid. He considers himself perfectly cured, and has sought and obtained work as a carpenter.

The fragments taken from him nearly fill a f. 3vj. vial.

CASE 2. Mr. P., of New Jersey, upwards of sixty, April 27, 1843. In the first operation Jacobson's instrument was used, and subsequently Heurteloup's; the latter being generally preferred as being more easy to find the stone with.

At the first operation, the instrument was introduced without difficulty, the stone found and crushed. It proved to be a mulberry calculus, (oxalate of lime,) and did not fall to pieces as the other varieties commonly do.

May 10th. Between this and the last date, Dr. McC. has crushed five or six large fragments, the detritus of which has been passed. To-day crushed several fragments. He leaves for home to-day.

May 16th. Mr. P. returned from Jersey, to be examined finally. One or two small fragments were crushed into powder, and discharged during the day. He declares himself perfectly free from all unpleasant sensations—in a word, perfectly cured.

Stone in the bladder may be distinguished from inflamed or irri-

table bladder, (which sometimes resembles it,) by the patient in the former affection feeling most easy when the bladder is full, in the latter, when it is empty.

Small Pox appearing in a family without any previous chance of Contagion. By E. C. BANKS, M. D., of Lawrenceville, Ill.

Mrs. G——, aged about 20 years, of robust constitution, pregnant 5 months, was attacked by a chill followed by fever of a moderate grade, remitting every morning, which continued for seven days. At the end of the seventh she commenced being chilly, which lasted for twenty-four hours; then her fever again arose and continued three days, when an eruption of a minute red papulæ appeared on her face, head and arms, and coalescing at their base. In a few hours more they could be seen making their appearance all over her body. In twenty-four hours they were well out, and fast running together. At this time they assumed a vesicular form. On the third day after the eruption first appeared, it was still more prominent, and the vesicles filled with coagulable lymph, of a dull whitish color; and surrounding each vesicle was a distinct areola. Fourth-day. Eruption still increasing, and becoming more prominent, and more yellowish than before. Fifth-day. Integuments much swollen, fever increased considerably, with an immense flow of saliva, pustules more turgid, and of a spherical form, flattened on the top; local inflammation and pain increased. Sixth-day. Much the same condition as on the fifth, swelling rather greater, fever quite as high; pus could also be seen in each pustule on the face, head and arms. All the symptoms now seemed more aggravated. Seventh-day. Condition much the same as on the sixth, fever rather less, thirst not so great. Eighth-day. Pustules still more flattened, and pitted in the centre, swelling of the integuments abated. They were now at their full size, and were completely confluent. The eyes nearly closed from the swelling around them, and in the eyelids. The eruption was worst on her face. Ninth day. A few pustules on her face had broken, and thin incrustations formed. The tenth day still more had burst, and discharged a thin ichorous fluid, which formed thin, soft incrustations of a brown color. The twelfth day her face seemed one entire brown scab, with here and there a portion peeling off.

Fourteenth day. Still desquamating on her face, head and arms, while on her body it was commencing to do so; though the eruption came out later on her body and legs, it began to dry rather earlier than it did on her face and head. Fifteenth day. Desquamation in full blast. Great itching now present. Secondary fever now arose, and before she had scaled off, she sunk and died, not however without having aborted about the tenth day of the eruption. The attending physicians did not consider it a case of small pox; but as others had taken it about this time, I was sent for, and found a near neighbor of this family laboring under variola. I went immediately to see the dead body, which I found well marked with the same disease. I at once sounded the alarm, by telling them it was small pox.

The family in which the first case occurred, lived completely in an out of the way place; no one ever visited them but their neighbors, and no small pox had been within a hundred miles of that place, nor had any communication taken place between them and any strangers, either pedlars or others. No clothing had been purchased except a shawl at one of the stores in our village, dozens of which out of the same pack had been sold to other persons, and no ill consequences had followed. They are people that keep at home most completely, and as I stated above, no communication ever takes place between them and strangers. Hence the impossibility of its being brought there, the man of the house positively asserting that no intercourse has occurred, and that no garment, except the said shawl, has been purchased for six months. All those who had been vaccinated escaped altogether, or with varioloid in the mildest form. Several very severe cases occurred among those who never had been vaccinated.

A consulting physician who was sent for from a neighboring city, Vincennes, Ia, decided it to be genuine small pox. It has spread greatly in consequence of the assurance by others than myself that it was not contagious. The eruption was confluent in a few, but distinct in the majority. In those who have had it in the confluent form, dangerous symptoms have arisen, and three have died who had it in that form, while four recovered. All the others got well who had it in the distinct form. I omitted to mention that the fœtus which this lady lost was completely covered with the eruption; it only lived three hours.

I am of the opinion that small pox occasionally originates without the influence of contagion, and that this was one of the cases of that kind. I see no possibility of her having taken it from any clothing purchased, not even from the shawl; and if so, others certainly would have taken it in the same way, as the shawls were sold to different persons out of the same pack. The fact, also, that she was sick seven days before the particular symptoms of small pox made their appearance, while in all the other cases who have taken it from her, and others who have taken it from them again, the eruption commenced making its appearance about the latter part of the third or beginning of the fourth day, militates against the idea of contagion.

[In connection with the above it may be stated that two cases have recently occurred in the Eastern Penitentiary of Pennsylvania, in which the "separate system" is strictly enforced. In one case the convict had been incarcerated for two years, and in the other for six. In these instances it would be difficult to explain the occurrence of the disease by contagion.—*Editors Examiner.*]

Tumors of the Testicle, with remarks on a case of Hæmatocele ;
By A. H. GRIMSHAW, of Wilmington, Del., late Physician to
the "Orphans' Shelter," Philadelphia.

Much difficulty exists in forming a diagnosis in tumors of the testicle. Hydrocele has been mistaken for hernia; a case is reported in which the operator went so far as to lay open the sac; only discovering his error when the fluid followed the knife.

Hæmatocele and hydrocele may be confounded, also hæmatocele and medullary fungus; hæmatocele and hernia, might be more easily confounded than the latter and hydrocele.

I present to you a short history of a case, lately coming under my notice.

J. W——, paper maker, temperate, æt. 40, consulted me, about the 1st inst., concerning a tumor of the right testicle, or, as he expressed it, "a growing of one testicle into the other." Latterly he had felt some pain in the groin, and the fear of hernia hastened his desire for relief. The swelling was elastic, certainly more so than fluctuating; more solid than hydrocele, with less corrugation of scrotum; no transparency.

I suggested tapping, calling it hydrocele, in which decision my friend, Dr. Goddard, agreed. It was my opinion, however, that the fluid was contained within the tunica albuginea, and that this occasioned the deceptive feeling of solidity. At least six years had elapsed since first noticing, and for some years no increase had taken place; until lately no pain had been present. A suspensory bandage relieved the pain entirely, thereby proving the non-malignancy of the tumor.

On the 8th inst. I tapped, intending to use an injection of tinct. iodine and water. At least a pint of bloody, homogeneous fluid flowed out. The sac was thickened; did not contract; there was also circocoele and enlargement of the vas deferens. The testicle lay in front and at the bottom of the tumor.

I deferred the use of the injection, believing that a better cure would be made by allowing the sac time to contract.

It will be perceived, that we were right as to the fact of fluid being present, but wrong as to the precise nature of the disease. Under the circumstances, I think I was right in hesitating to inject an irritating fluid, since I found, in place of hydrocele, hæmatocele. The latter is generally laid down in books as occurring suddenly, and after tapping for hydrocele. Pott, however, describes an effusion of blood within "the tunica albuginea, or proper coat of the testicle, and if the quantity be considerable, it will afford or produce fluctuation to the hand of the examiner, very like to that of an hydrocele of the tunica-vaginalis." He further says, that "if this be mistaken for simple hydrocele, and an opening be made, the discharge will be blood; not fluid, or very thin; not like to blood circulating in its proper vessels; but dark and dusky in color, and nearly of the consistence of chocolate." According to this author, extirpation of the testicle is the only remedy.

The most delicate touch cannot reveal to us whether we have, in the tumor before us, water or a bloody fluid. Neither can we base our diagnosis on the transparency, or the reverse. No great injury would be caused by puncturing even a sarcocoele, or like solid tumor of the testicle, except that "dry tapping," as in some other situations, seldom redounds to the credit of the operator.

I have remarked above, that I believed this fluid was water; but that it was contained within the tunica albuginea. In an ordinary hydrocele, we would only have as coverings of the fluid,

integuments, cellular tissue, dartos and tunica vaginalis; none of these separately, nor all conjoined, possessing a structure such as to produce that "deceptive feeling of fluctuation." The tunica albuginea, however, is "dense strong, and fibrous, resembling in structure the tunica sclerotica.

In fact, I might have compared the impression of this tumor upon the hand, to that made by an eye from a large animal, such as the ox.

Chelius speaks of medullary fungus, and of "the absence of all hardness and irregularity, and the very delusive feeling of fluctuation, and the very indistinct pain;" these symptoms were present, but the pain only for a month or two; its growth was slow; fungus is rapid in growth.

Collections of fluid, under fibrous membranes, are especially apt to be mistaken for encysted tumors, requiring the use of the knife. Within my knowledge, a surgeon operated with success upon an abscess under the fascia lata of the thigh, hoping, no doubt, the evidence of his skill would grace his pathological cabinet. It is this doubt, this uncertainty, the memory of opinions given, and not borne out by the event of the case, that causes our patients "rather to bear the ills they have," than trust a knife, which may not eradicate the cause of their suffering.

At this moment the remembrance of a case, of what was supposed, before operation, to be enlarged testis, requiring excision, comes to my mind. —, married, &c., came to the Philadelphia Dispensary in 1844, and was directed to the surgeon then on duty, who kindly obtained admission for him to the Pennsylvania Hospital. It was there agreed to extirpate—the patient was placed on the table, an incision made, when, to the astonishment of all present, a *bony sac*, containing fluid, and a perfectly healthy testis, were found.

In this case there was hardness and pain and no transparency: the history of the case threw no light upon it. Sir Charles Bell mentions, that in old hydroceles, "the tunica vaginalis becomes much thickened and even ossified." So we find another landmark, in making our diagnosis, is uprooted. We may find this bony case, very irregular, probably knobby, giving the idea of a sarcocele, which can be readily cured by appropriate medical treatment.

My assertion, that the bag truss having relieved the dragging

and pain, proved non-malignancy, may be called in question. It is said "sarcomatous degeneration of the testicle" does not produce, for a long time, more than a dragging and slight pain, which is removed by a bag truss.

Again, we may confound cystic swelling of the testicle with hydrocele, and much more easily, with hæmatocele.

With hernia, hæmatocele might be, even by a careful surgeon, confounded. A patient has had a pain in the groin; he also says, that for some days he has had no evacuation from the bowels. Some men are thrown into paroxysms of pain by the mere mention of an examination; the approach of a hand causes them to groan; while others, actually in more danger, will allow you to handle them very roughly without an exclamation.

Suppose one of these irritable subjects is attacked with cholic, calls a physician, who, being a careful man, and having his attention drawn to hernia by the complaint of cholic, enquires whether his patient has a rupture; being told there is a tumor in the pubic region, he examines: in all probability, having suspected hernia from the first, he jumps at a conclusion, endeavors to reduce by taxis, &c., and, as in cases on record, his astonishment is only equalled by his chagrin when his error is discovered.

It remains to be proved whether Potts's assertion is correct, as to the necessity of extirpation.

May 15th, 1849.

Case of a Negro woman, who gave birth to twins of different color. By R. CARTER, M. D., Virginia. (Communicated in a letter to one of the Editors.)

I promised you when I left Philadelphia, that on reaching home I would try and find out something concerning the woman who had twins, the children being unlike in color. The following is what I have ascertained in regard to the case. The negro woman Winny, is twenty-three years old, of good constitution, and *as black as the ace of spades*. She has borne three children previously to this labor. She states that in the month of April, 1848, she had connection with a white man, and on the day following with a black one. Some week or ten days elapsed, when her catamenia failed to appear. After this she had the ordinary symptoms of pregnancy, the nausea and vomiting being more dis-

tressing than in her previous pregnancies. In February, 1849, about the middle of the month, she was delivered of twins. The dark colored child was first delivered and afterwards the mulatto. The children were robust at birth. One of them is a mulatto, and the other is as dark as negro children generally are. The woman is certain that they were begotten by different fathers, and this is the conclusion to which all have come who have seen the children.

Treatment of Cholera. By C. A. FINLEY, M. D., Surgeon, U. S. A.
To the Editors of the Medical Examiner :

GENTLEMEN,—Having done me the honor to publish in your journal my report of the treatment of two cases of Asiatic cholera, together with my view of the inapplicability of opium to a well marked, or fully developed case of that disease—permit me to lay before you, in the following extract from my quarterly sick report, the results of my treatment.

“It will be seen in this report, that there have been sixty-six cases of Asiatic cholera under treatment; these were—even the mildest—characterized by the discharges peculiar to that disease. The doubtful cases of diarrhœa have been placed under the head of diarrhœa. The treatment, in every case which has occurred since my special report, has been that laid down in that report—the free exhibition of calomel and camphor, and the quinine after reaction was fairly established. Four of the sixty-six cases were lost; among the recoveries were many in incipient collapse, several in whom the pulsation of the radial artery could not be discerned when the patients were admitted. Ptyalism occurred in ten or twelve cases; in only three cases was it severe, or of more than ten days’ continuance. As soon as the dejections gave evidence of the restoration of the biliary secretion, the *ol. ricini* was given freely, and assisted by enemata, whilst every four or five hours quinine and camphor in doses of five grains each were administered. Under this treatment few cases remained in the Hospital longer than five days.”

There were seven cases of the sixty-six, in which calomel to the amount of three hundred grains was given, and the period of their continuance in the Hospital was as follows: Rhetten thirteen days, Stark three, Douthett twenty, Brown three, Hoeffler nine, Kippe five, Doran thirteen.

Newport Barracks, Ky., August 15th, 1849.

Cholera—The Sedative plan of Treatment. By I. L. ADKINS, M. D., Philadelphia; Physician to the Moyamensing Cholera Hospital. (Communicated in a letter to Prof. Dunglison.)

In sketching, at your request, and for your perusal, a few cases of Asiatic Cholera, with the treatment, I hope I shall not be understood as claiming any particular merit or superiority for the plan pursued and found successful at the Moyamensing Hospital; although, without my knowledge or consent, and to my annoyance, comparisons have been made, and my name paraded in the public prints, as certifying to a statement, which, however true, was given for a strictly private purpose, as distinctly understood by a number of persons present at the time.

So also I can say of what purported to be a *certificate* from my friend and colleague, Dr. Smith.

My communication will be mainly in reference to the point on which all are most interested, the *treatment* of Epidemic Cholera. As to the cause, pathology, &c., more curious than important, and less understood than either, I leave them to others, abler and more disposed than I am to discuss them.

In the beginning of the epidemic, and occasionally since, I employed the various agents and modes of treatment set forth by different writers, certain of them claiming to be almost specific. If I had ever believed in such a thing as a specific in disease, I should, before this, have been driven to abandon the belief, by the protean character of the disease in question, and the resources necessary to be drawn upon to meet the various indications as they have presented themselves.

You are aware that I have, from the first, whenever I have had it in my power, employed what I call the *sedative plan of treatment*, giving it preference over the strictly stimulant, which has been most generally, perhaps, in favor. Let it be understood here, that it is at the outset, the invasion of the disease, when the morbid influence, (whatever it may be,) the "cholera poison," is doing early, its fatal work, that this treatment is most serviceable. At any time, however, from the beginning of the attack to approaching collapse, and even occasionally in collapse, the destructive condition may be removed by it, and the patient saved from

death. At this stage of the disease, when the cause may have ceased to be in operation, and the *effects* have to be combated, stimulants and tonics are judiciously employed.

Impressed with the idea, that there is, in cholera, irregularity in the organic actions, the brain being at times greatly excited; at others, the alimentary tract, and at others, the muscles alone; with, in almost all cases, the escape of fluids from the lining membrane of the stomach and bowels, the result of organic excitement, I was led to adopt, almost exclusively, the *sedative plan* of treatment, which has, in the end, proved successful and satisfactory. The agents employed were opium and blood-letting, assisted by warm applications and warm drinks, until diaphoresis was fairly established, combined with perfect rest in the horizontal posture. These means, as all know, are well adapted to many conditions which we meet with, not only in cholera, but in other diseases; to relax spasm; to equalize the circulatory movements; allay excitement; produce sleep and warm perspiration, and check (opium especially) the inordinate discharges, whether rice-water or other. These are the means, singly or conjoined, employed with judgment and discrimination, which will, I believe, in most cases be found all-sufficient.

I will commence with a case which occurred to me in private practice before the hospitals were opened. I was called to see a daughter of Mr. W., in the district of Moyamensing. When I arrived, however, she was so far gone, that I did nothing in her case, especially as the physician in attendance was absent. She died, apparently in great suffering, in a short time, and before I had left the house. I learned that her mother had expired but a few hours before; and while standing between these two victims of cholera, a third, the oldest daughter, a girl of about sixteen, was attacked just as I was taking leave. She threw from the stomach, without effort, two or three times in succession, the characteristic rice-water, and on inquiring I was informed that she had diarrhœa. Her countenance assumed the anxious expression, and her eyes the sunken appearance, with the blue ring around them, which is almost pathognomonic of this disease. Her face was bedewed with a cold sweat, and the pulse was becoming more feeble every moment. She quietly and sweetly remarked, that she

"would soon feel better;" but her mother and sister, who a few hours before were in tolerable health, were now lying dead before her. Her frantic father insisted that I should bleed her; that if I did not she would follow the other two, both of whom *he* had desired to be bled. Doubtless, the physicians arrived too late to do good by bleeding or any other remedies.

In this case I was on the spot in time. I saw the deadly stroke and felt my responsibility. I embraced the moment, boldly directed my agents, and the girl was soon well. From a vial of laudanum, which was on the table, I poured two teaspoonfuls nearly, and with a little water gave it to her at a draught. I tied up her arm, and took away about sixteen ounces of blood. A hot foot-bath was prepared, thick with mustard, in which her feet were kept 30 minutes, then taken out, wiped dry, and warm bricks applied, the body being well covered at the same time. A profuse perspiration broke out; the pulse came up from the moment the blood began to flow freely, and now was round and full. Directions were given in case of excessive reaction (which did not occur), and at my next visit, on the day following, I found my patient almost able, and quite anxious, to get up. This was my first case of Epidemic Cholera. Wine and water, and a little weak toddy were allowed her, and she was finally put on the sulphate of quinia.

She is now well.

CASE 2. I was called, July 2d, to see Miss Q., æt. 14, residing in Seventh street near Wharton. She had the rice-water evacuations from the stomach and bowels, and was somewhat cramped. \bar{x} ij. of blood were abstracted, and tinct. opii f. $\bar{3}$ j. given at one dose. Mustard was applied to the epigastrium, and warm applications to the feet. Very little else was done, and she awoke from a sound sleep, feeling pretty well. On the second day she was up; a tonic was ordered, and I saw her but once afterwards, on the third day, when she was quite well.

CASE 3. Mrs. Q., mother of the last, æt. 35, was attacked July 6th with severe cramp and coldness of the extremities, intestinal spasm, and excessive vomiting. The ejections were at first clear as water, then like rice water, and finally tinged with bile. Bleeding, both general and local, was resorted to, for the purpose, in this case, of controlling the painful spasm and equalizing the

circulation. Twenty ounces of blood were taken, and although in a semi-recumbent posture, and a very delicate looking woman, without the least appearance of syncope. Twenty leeches were applied to the abdomen, and, afterwards, a warm poultice for the internal pain and spasm. Tinct. opii. f. ʒj, with a little mint water was given at a draught. Under this treatment, the pulse, which was very small at the wrist, became full and soft, the pain and spasm were allayed, and she fell asleep. At my visit next day, she was found perfectly clear of cramp, and had no more vomiting. Wine and water, gruel, &c., were allowed, and she was ordered to remain perfectly still. Next day I was sent for in great haste, the messenger stating that all the symptoms had returned. She had gotten up against orders, and I found her vomiting, but without cramp. Ice, as before, was now given freely, and a sinapism applied over the stomach, but without much effect. The effervescing draught was given, which allayed the irritability, but for a time only; and neither pill, powder, nor mixture would remain. Morphia, camphor, creasote, brandy, all were alike rejected.

A blister to the epigastrium was ordered, the raw surface to be dressed with sulphate of morphia. A few drops of ol. succini in mucilage, which had also been directed, having given a little relief after I had gone, the attendants neglected the application of the cantharides, and early next morning I was summoned, and found matters as bad as before.

On consultation with a professional friend, whom I had asked to call with me, the emplastr. cantharid. was applied, with cups and scarifications along the spine. An opiate was also given. I called again during the day and found her much improved.

Next day my friend called with me, and we were told that she was more unwell. The violent spasmodic action was more alarming to some of the friends than before; but it was not difficult to see that we had more of hysteria to contend with now than any thing else. Tinct. valerian. was ordered to be taken in drachm doses every hour, with occasionally liq. morph. sulph.; and an injection of assafœtida and tinct. opii was given. Gentle friction was kept up for a while, and she became quite composed. I had very little further trouble, except in dietetic management. The gastric irritability returned whenever food was taken; and for

several days she took no nourishment but wine whey, and wine and water. Sago, farina, and broths, were finally tolerated; sulphate of quinia was given, and at the end of a week she was quite restored. There was no diarrhœa in this case, and I should have stated, that a purgative enema was given once or twice with the effect of checking the vomiting.

CASE 4. I was called, July 17th, to see Mr. M., æt. 50, near Eighth and Carpenter. Found him going rapidly into collapse, almost pulseless, and with the peculiar whispering voice, blue and shrunken fingers, and a ghastly expression of countenance. He had suffered diarrhœa to continue for several days, and his legs were now very much cramped. He threw the rice water secretion from his stomach almost every minute while I sat by him. There was very little pulse at the wrist; but on auscultation I found the heart laboring violently.

I took about sixteen ounces of blood from his arm, and as it flowed at first with some difficulty, thick, and as black as pitch nearly, there was a sensible increase in the force of the pulse, and a diminution in its frequency. He expressed himself as feeling much relieved of the oppression and sense of suffocation at the præcordia. Laudanum being in the house, I gave him a large teaspoonful.

Mustard was applied to the epigastrium and a mustard foot-bath prepared. He fell asleep, and on awaking was found to be much better. Slight diarrhœa remaining, it was treated with

Pil. hydrarg.	gr. xij.
Pulv. opii,	gr. iij.
Pulv. ipecac.	gr. ij. M.

Made into twelve pills:—one every two hours.

Calomel, acetate of lead, and opium were afterwards given. He was doing very well, but from imprudently taking too much water, vomiting returned on the third day. Creasote gtt. iij., in aromatic mucilage, was ordered to be given occasionally, and ammon. carb. gr. v., every hour, when the stomach would bear it. The creasote was not taken, but the powders of carb. ammon. were,—to which was ascribed the cessation of vomiting when I saw him again.

He went on doing well, gradually regaining strength, and the shrivelled surface filling out again. I did not think to pay him another visit, and directed an infusion of *prunus virginiana* to be

taken occasionally, with careful diet, the horizontal posture, &c. and cautioned him against drinking cold water. It seemed that the family had placed the vessel containing the infusion of the bark in a bucket of water at the side of the bed to be kept cool. In the night, according to his own statement, he helped himself largely to the water, and a fearful and rapidly prostrating discharge from the stomach and bowels was the consequence. I was not to be found in the night, and on calling in the morning, and seeing what had happened, I at first declined having anything more to do with the case, which was now hopeless. Stimulating and other means were resorted to, but without avail:—indeed the family had stimulated him to intoxication and nearly to death before I arrived. He died the next day, the sixth of his illness, a victim rather of imprudence than of cholera.

CASE 5. George C., colored, æt. 30, was admitted into the Moyamensing Hospital laboring under symptoms of cholera, on the 4th of July. He had the rice-water evacuations and some cramp, and was treated with combinations of opium, camphor, and calomel, and soon appeared to improve. On the third day, however, he passed into a low adynamic condition, with muttering delirium. Blue mass and sulphate of quinia were given, and counter-irritation was employed on the epigastrium and spine. Wine and water and wine in gruel were allowed, and he was convalescent on the sixth or seventh day. Ptyalism was produced, which was the only further trouble.

CASE 6. Samuel H., colored, æt. 13, was admitted into the Hospital on the 6th July. He had a cold, shrunken surface, scarcely any pulse at the wrist, cramps which caused him to scream constantly, and insatiable thirst. He had now no discharges, although he stated that he had had both vomiting and diarrhœa before coming into the house, which he attributed to eating pine-apples. He took camphor, chloroform, and opium, differently combined, and also small and repeated doses of calomel. These were discontinued, and he was allowed the free use of cold drinks, his only cry being for water, the bath, and fresh air. This was an interesting case in many respects. Pulseless as he was, he would suddenly rise from his bed, and start down stairs unassisted to get a bath, loudly screaming if opposed. Believing that he had gastro-enteric inflammation, and finding it impossible to control his desires, I

objected to anything like stimulants being given, and he was liberally allowed ice and ice water, and permitted to bathe. Without aid he would jump up and get into the bath, when not closely watched, and turn the water on himself. He seemed perfectly at ease in this condition, and would stealthily let his head sink far enough down for the water to flow into his mouth, as if he desired it by the gallon. On any attempt to remove him he would implore the nurses to let him remain and die in the bath. When taken out, he would roll to the nearest door and hang his head out to get the air. These scenes were enacted over and over again for two days and nights, during which he was watched as closely as possible, and his urgent wants to a great extent gratified. He died on the night of the 8th, his intellect unimpaired from first to last. A few hours before death, he became perfectly quiet and asked for nothing.

Necroscopy.—The stomach was nearly filled with pure pus, as tested by the microscope; and the intestines with pus, sanguineo-purulent matter and blood, in different parts of the tract. The mucous membrane was of a bright red color, continuously and in streaks and patches,—showing evidently that there had been intense inflammation. The colon was in an ecchymosed as well as inflamed condition. The valvulæ conniventes were greatly enlarged, and the glands of Peyer prominent and slightly ulcerated.

The few hours repose which he enjoyed before death was doubtless owing to the termination of the inflammation in suppuration. There was no congestion of the liver, lungs, spleen or brain. All, as also the heart and kidneys, were healthy-looking. When the aorta was cut, the heart emptied itself of very black, thick blood; no clot was found in the auricles or ventricles. The liver had been performing its functions, for the gall-bladder was distended with bile, and the duodenum contained a small portion, and was stained throughout its length, which may have been from transudation after death.

This was the most remarkable and unnatural case of nervous endowment—cold, pulseless, and dying, as the boy was, for 48 hours—that has ever come under my observation. Muscular contraction was noticed for some time after death.

CASE 7. Mary Thedford, æt. 15, was brought into the house collapsed, July 15th. There was a very slight vibration at the

wrist, and one or two physicians who were visiting us at the time proposed using the lancet. Veins of both arms and feet were opened, but no blood would flow from the orifices. Stimulants and cordials were given, and ice and ice water at her earnest entreaties. She died on the 17th, in about 48 hours from the time of attack.

CASE 8. Eliza T., æt. 45, mother of the last described, was very suddenly attacked in the hospital while watching over her daughter. Almost without food or sleep, resisting all our efforts to separate her for a while from the precious charge over which she was incessantly bending, she fell down suddenly without any premonitions, to our knowledge, and went hurriedly into a fatal collapse, defying the most active and energetic measures. A vein of her arm was opened, and blood, which flowed only by forced means, as friction, &c., was taken to the amount of about 8 oz. Opium was freely given, and hot cordial drinks, warm applications and friction were employed; but all to no avail.

I have never seen two cases so parallel. Every want, entreaty, desire, expression and movement of the daughter was repeated by the mother; and before the former died, she constantly cried from one part of the house for her mother, while the mother in another part as often asked for the daughter.

Mother and daughter died in about 48 hours after the attack; the symptoms identical, but opposite treatment employed in the two cases. In neither were vomiting, diarrhœa, or cramps prominent symptoms. "Water, water, water," in a whispering, sepulchral voice, was the continual cry of both; and death in both cases seemed the result of a prostrating blow on the nervous system,—rapid exhaustion following without the usual drain from the stomach and bowels.

The orifices in the veins, in these and another fatal case, never closed, but remained gaping like a gash in the rind of an orange: there seemed not enough excitement in the system for the process of union.

I will here remark, that I have not been so well satisfied with blood-letting in hospital as in private practice. It is true we bled but few—not more than five or six cases—in two of which it failed. The constitutions of such as are brought to the hospital, are so broken down by depravity and destitution, that I concluded we

were putting the remedy to a severe test, and have been perhaps over cautious on account of the two cases lost in which the lancet was used.

CASE 9. Elizabeth K., æt. 40, Shippen street, was admitted July 24, with vomiting, diarrhœa, and cramps. Opium (gr. vj.) was given her; sinapisms were applied to the abdomen and ankles, and bottles of warm water about the body. The vomiting was very troublesome, as it has been in a majority of the cases brought to the Moyamensing Hospital,—the stomachs having been apparently injured by the miserable life of dissipation led by most of them.

This woman was soon better, but relapsed on the third day from drinking too much water, which she contrived to get. She must have had a hundred discharges both ways in two days following. Combinations of opium and plumb. acet., creasote, morphia, &c., were employed, but with no visible effect. She became completely exhausted, and was so far gone as to be able, by signs only, to beg that we would do no more for her. Impatient and dissatisfied with the result of the small and repeated doses employed, I gave her one night about 400 drops of laudanum, and introduced an opium pill of eight grains into the rectum: from that moment every unfavorable symptom disappeared, neither vomiting nor diarrhœa, which were immediately arrested, appearing again for two weeks, for which time we were obliged to keep her, because she had no home. A blister was at the same time applied over the stomach, which probably had a good effect. She was supported for some time on porter, not being able to take any thing else. This was a remarkable case of recovery, and of tolerance of opium.

CASE 10. Jane McC., æt. 26, was brought in, July 26th, quite feeble, but able to walk to her bed. Very little pulse at the wrist, and rice-water evacuations. That morning her husband was buried, having died of cholera the day before. Her child, which we suffered to be brought in with the mother, died next day in the hospital of inflammation of the brain.

Mrs. McC. took two pills containing six grains of opium; and subsequently tinct. opii. f. ʒj, with a little tinct. zingiberis. Bottles of hot water were placed about her person, and toast water was allowed to satisfy her thirst.

As free diaphoresis came on, toast water and thin rice flour water were freely given, with the effect of rapidly refilling the

vessels, and filling out the shrunken fingers. The vomiting also ceased, and the stomach retained whatever was taken into it. Tonics and gentle stimulants were given,—as wine and water, porter, Huxham's tincture, &c. She was discharged well on the 30th.

CASE 11. Ann L., was brought into the house in a fit of cholera and drunkenness combined. The cramps and spasms were most violent; no pulse at the wrist. Her face was livid from cerebral congestion. Veins in both arms were opened, but not a drop of blood would flow. I then opened the external jugular, and took about 16 oz. of blood, which was very dark and thick. The face became more natural in color; the circulation was restored to the capillaries of the extremities, and the pulse returned to the wrist. The patient was so far relieved that she went out of the house next day. The bleeding was followed by a draught of tincture of opium, and assafœtida.

CASE 12. Joseph W., æt. 35, was admitted August 6th. His wife died of cholera at home the day before. He was in apparently hopeless collapse; pulseless, voiceless, and almost breathless. His eyes were sunk in the orbits; his fingers blue and shrivelled like a washerwoman's; tongue cold; the whole surface cold, blue, and bedewed with a death-like moisture. He looked like any thing else than a living man. Some physicians, who happened to be present when he was brought in, pronounced him moribund. The nurses, as usual, applied ten or twelve bottles of hot water, and hot bricks about him; a blanket was drawn closely round his neck, and two pills of eleven grains of solid opium were given him by my friend and colleague, Dr. Smith. He fell into a deep sleep, sweated freely, and awoke in a few hours expressing himself refreshed and feeling well. Toast water and cordial drinks were freely given, and the pulse gradually returned to the wrist. The usual stimulants and tonics were now directed, carbonate of ammonia, sulphate of quinia, wine and water, etc. He was gently rubbed with dry flannel several times a day, and was able to sit up a little on the second and third days. There was suppression of urine in this case, as in most of the bad cases of cholera we have had, for which mucilaginous drinks, as flaxseed tea, were freely given, with the desired effect. The patient was discharged well on the 14th. His cure seemed to some almost miraculous. I

must not omit to add, that he was pretty badly narcotised. This has not often occurred to us with our large doses of opium; but we are not alarmed if it does, as we are quite willing to replace the "cholera poison" by the "opium poison," if I may so speak, especially in extreme cases like this, and many others that have been brought to the Moyamensing hospital.

CASE 13. Thomas B., colored, æt. 60, was brought into the house from Seventh and Baker, August 7th. He was placed opposite the case last described, and seemed about as bad, but not worse. The same general plan of treatment was carried out, but he died in a few hours after he was admitted. I have observed that, as elsewhere, cholera has proved more fatal in the colored than in the white cases under my charge.

CASE 14. Patrick McGuire, æt. 36, was admitted August 7th, and was perhaps as far gone into collapse as cases 12 and 13. Tinct. opii. fʒij. in camphor water was given him, and hot applications were employed with warm drinks and gentle friction for a short time. As the rice flour water and toast water and gruel were poured down during the sweating process, some one standing by dryly remarked, that he could see the *gruel running into his fingers*, so rapidly did they seem to fill up. A second dose was given,—tinct. opii, tinct. card. comp. aa f.ʒj., aquæ fʒj. Patrick raised his head up in *three hours*, and said, "thank God I feel nearly well." Wine and water, occasionally porter, and tinct. cinchon. comp. were given him, pro re natâ, and he was discharged well on the 16th of August.

CASE 15. I was called late at night, July 16th, to see Mrs. A., in Carpenter street. She had severe cramps and vomiting of rice water. Her pulse was not so feeble as it was irregular. ʒxvj. of blood were drawn from her arm. She had some nervous excitement, and I ordered for her,—sp. æth. sulph. comp. f.ʒj., morph. sulph. gr. i., to be taken in teaspoonful doses every hour. Mrs. A. was quite well in three days.

I have described as briefly as possible the history of a few cases of cholera, and the main treatment employed. They are but a few out of a great number, and are fair samples,—some of them mild in their character, others bad enough; all, however, here described, I believe to be true cases of epidemic cholera. More than a hundred

have been under my charge in hospital and private practice ; of all grades, from the most malignant to the mildest type. I often hear of gentlemen asserting, that there has been but little of real Asiatic cholera,—that they have seen no cases, &c. I only wonder that they, who doubt, have not taken the trouble to visit the hospitals and private cases in the Districts of Moyamensing and Southwark especially. They cannot account for so many cures, when it has generally been conceded that half of all attacked die. They say that all kinds of experiments have been made, and with similar results. I answer to this, that the more experiments we tried, and the more complex we made our prescriptions, the less successful were we in the Moyamensing hospital. Whereas, since our treatment has been simplified, and we have done boldly *and at once* what we intended to do, we have had cause to be gratified with the results. I look upon the disease as one that will not *wait* to be trifled with, and that a favorable or a fatal termination depends, in very many cases, on a slow, or a promptly vigorous plan of treatment. With this view, I very early decided to give all that I thought the patient would bear at a *single dose*. The agent I have preferred is opium in some form;—opium in decided, sedative doses. I am attached to this method of treatment for its *simplicity*, among other merits which I conceive it possesses. Many indications are met by opium. The inordinate discharges are arrested; spasm is relaxed; and irritability of stomach and general excitement allayed. Time is saved by the *one dose system*; the patient is left undisturbed to quiet and to sleep. Mr. Corbyn says “if there is a crisis in any disease, it is sleep in cholera.” I think I have seen in many instances the truthfulness of this remark.

I have not entered fully into all the minutiae of treatment,—the adjuvants, corrigents, &c. employed. My main object has been to show (whether considered philosophical or not) how we have combated and overcome *the cause of death*; not so much to detail the after treatment, without which the patient, in many instances, might get well. The symptoms have been watched, and met, as they appeared, on general principles.

Purgatives and purgative enemata have been occasionally employed with benefit;—anodyne injections, poultices, sinapisms, pediluvia and full baths, ice, ice water, carbonic acid water; the vegetable and mineral astringents by the mouth and rectum, to

check the discharges, and occasionally, with benefit, injections of sulph. quinia in solution. Blisters, leeches and ice *externally*, and all kinds of friction, have been applied. Some of the agents afforded relief at one time, and failed at others.

As before remarked, we became tired of mixtures and combinations. We modified Hawthorne's, and all other plans—most of them being entirely too systematic and empirical for our use, and unnecessarily complex, seeing that the really essential, active ingredient of them all is opium. Opium, then, and blood-letting, to equalize the circulation, reduce irregular excitement, &c., judiciously employed, we regard as the Samsons in the cure of cholera; assisted, and materially, too, by warm applications, warm spiced drinks, strict quiet, and *horizontality*.

A formula, proposed by Prof. Meigs, I have employed with good effect at times, and often, in cases of irritable stomach, when nothing else was so well retained:

R Morph. Sulph.	.	.	.	.	.	gr. v.
Camphor.	.	.	.	.	.	gr. xx.
Ol. Cajeput.	.	.	.	.	.	gtt. x.
Tragacanth.						
Ext. Gentian.	.	.	.	.	.	\overline{aa} q. s.

M. To be made into a hundred pills.

I have sometimes added five grs. of piperine, in place of five grs. of the camphor, which to my taste makes the pills rather more agreeable. I have no great partiality for camphor or pepper; and not much more for calomel, in the *urgent stages*. We have used calomel and blue mass, but generally in mild cases when there was more of diarrhœa than any thing else, or in convalescence from the cholera attack. In some cases, under such circumstances, I have found benefit from mercurials, which have produced bilious evacuations, and removed offensive accumulations from the bowels, as often purgative enemata without mercury did. Diuretics were employed in many cases in which the urine was retained or suppressed. Frequently, it was necessary to draw off the water (which was always high colored) with the catheter.

I have said but little of post-mortem appearances. My time has been so much occupied in hospital and other duties, that, to my

regret, I have made but few examinations. I have found, however, in those few, an inflamed and softened condition of the gastro-enteric mucous membrane, and in one case an eruptive, mottled appearance. I have hastily written out these homely, but I believe practical sketches. My object has not been to theorise or discuss mooted points, but, as before said, to offer you, not without distrust, an unvarnished statement of facts as I believe them to have occurred to me.

I should like to furnish you with a summary of the number of cases, deaths, and some other general points which might prove interesting, but have thought proper to withhold such a statement, till after some action shall have been taken on the Hospital reports by the Board of Health.

On the Modus operandi of Quinine in Intermittent and Remittent Fevers. By D. WARREN BRICKELL, M. D., of New Orleans.

Messrs Editors,—In the July number of the “American Journal of the Medical Sciences,” we find some very interesting “Notes of Hospital Cases,” from the pen of Dr. H. Hartshorne of Philadelphia. Amongst others, he mentions some cases of intermittent and remittent fevers, treated by Dr. Gerhard, and volunteers the following deduction.

“The impression was formed, that of the two elements of fall fever—the febrile condition and the *miasm-cause*—it is the latter only that is addressed by the remedy in question. It arrests fever by acting as an antidote to the poison which produces it.

“Can such facts, then, point to its use with a similar intention in the exacerbations of other fevers, entirely different in cause, as the typhus and typhoid? Certainly not.”

Now, may we be allowed to ask of Dr. H. what this “*miasm-cause*” is? What is its form, consistency, chemical composition? Is it either visible or tangible? Indeed, we should be most happy to have anything connected with its history, anything which is beyond the pale of disputation, anything veritably established. Moreover, such information being furnished us, we would be pleased to know the action of quinine on this “*miasm-cause*” out of the human body, either chemically or otherwise.

In the mean time, however, we will take it for granted that

nothing is as yet known of the nature of this supposed element, and venture a few humble animadversions on the deductions of the writer.

If, as we assert, we are all in total ignorance of the nature of the element, what right has the writer to imagine its presence in the system during an attack of intermittent or remittent fever? How very difficult is it frequently to detect the presence of, or to remove foreign bodies, *causes* of disease, even where they possess all those physical characteristics which tend to render them evident in every sense of the word! Again, remove the foreign body, a splinter, a nail, &c., or allow nature herself to perform the task; days elapse, during which time the patient appears to be doing well; suddenly, however, tetanus supervenes; the life of the patient is threatened, notwithstanding the removal of the original *cause*. Shall we still suppose the presence of this cause, and resort to the knife, its only antidote; or shall we address our remedies to the symptoms of the patient? Suppose a man is laboring under what is called “*coup de soleil* ;” in this case the cause of the disease, although subtle, is more evident than the “*miasm-cause* ;” but do we address our remedies to the sun? Have we any right to suppose the existence of the sun or its causative emissary in the body of the patient?

But let us approach the bed-side of a patient. We find him with hot and dry skin, accelerated pulse, indeed all the symptoms characterising that state ordinarily denominated *fever*. 'Tis a case of remittent fever, and we find him in the midst of an exacerbation. He tells us he is six days from Wilmington, N. C.; that he was taken sick the day after leaving said port; has had an exacerbation of fever every day during five days. We administer 15 to 30 grains of quinine; in three hours his pulse is very much reduced; his skin is bathed in a free perspiration; no pain; sleeps quietly; we all agree that this change of condition is attributed to the quinine.

Now the question arises, whether the remedy acted on the *cause* of the disease, (of which we are most profoundly ignorant,) or on the man himself. If on the *cause*, we should be highly gratified to be furnished with the data for such a conclusion, together with something explanatory of the change produced in the condition of the man—as the reduction of the pulse, free perspi-

ration, &c. Surely the writer will not contend that the antidotal effect of the quinine on the "*miasm-cause*" within the man, has any agency in effecting this happy change. For our own part, the phenomena consequent on the exhibition of quinine, have always impressed us with the belief that the agent acts on the man himself, and it must be something more powerful than a mere supposition, a theory, that can convince us to the contrary. When we apply sinapisms to the cold extremities of a patient laboring under congestive fever, (a so-called *miasmatic* fever,) and a rubefacient effect is produced, thereby in a great degree improving the condition of the man, we can readily conceive of the action of the remedy on the part to which it has been applied, but it must be a great stretch of the imagination to think for a moment that the *cause* of the disease has been acted on by the mustard.

But quinine sometimes *fails* to cure fever, or, in Dr. H.'s view of the question, to *antidote* the *cause*. How does the writer account for this? Such cases, too, will often yield very readily to arsenic; sometimes to opium; sometimes to the purgative plan of treatment. We have seen cases of mild remittent fever cured by the application of the cold *douche*. Are all these remedies antidotes to the "*miasm-cause*"? &c.

However, we think the Dr. abandons his own position even before the sound of the enemy's trumpet reaches his ear. In one sentence he says, "It (quinine) arrests fever by acting as an antidote to the poison which produces it." And the second sentence after this, he says, "The writer saw no facts, in any case of its administration, to justify any other appellation for its effects than those of tonic and nervous stimulant."

"Tonic and nervous stimulant" of what? Not of the "*miasm-cause*;" but of the patient to whom the remedy was administered. He acknowledges this "tonic and nervous stimulant" effect; and yet asserts that it is the "*miasm-cause*," only, which is addressed by the remedy. To us all this seems "confusion worse confounded." Despite the careful "operation of displacement" to which the author has subjected the "*miasm-cause*," this imaginary something—or rather, nothing—is found to be (in the ordinary phraseology of the day,) about "as clear as mud."

When the writer has personally tested the efficacy and *modus operandi* of the "large quantities" of quinine administered by

"some southern practitioners," the latter will more willingly listen to his speculations concerning the probable causes of the sedative action on the pulse, whether it is "cerebral oppression, analogous to narcotism, or the *antidotal* influence above spoken of." He acknowledges that he has never administered the medicine in these "large quantities," and whilst we would most earnestly recommend the practice, we must contend that his present deductions are, to say the least of them, premature.

Whether quinine should be administered in typhus and typhoid fevers "with a similar intention,"—its antidotal influence over the "*miasm-cause*,"—we will not pretend to argue; perhaps the causes of these fevers—typhus and remittent—are totally different. One thing, however, we will venture to say; if the writer will administer 30 or 40 grains of quinine, combined with a grain or two of opium, to cases of typhus and typhoid fevers in the *commencement* of the attack, we think he will find the agent quite as efficient in checking these fevers as it is in checking the so-called *miasmatic* fevers. These results we have repeatedly witnessed, but we have never yet concluded that quinine is an antidote to the *cause* of typhus fever.

BIBLIOGRAPHICAL NOTICES.

A Dissertation on the Practice of Medicine; containing an account of the Causes, Symptoms, and Treatment of Diseases, and adapted to the use of Physicians and Families. By TOMLINSON FORT, M. D., Milledgeville, Ga., 1849. 8vo. pp. 740.

In acknowledging the receipt of this volume, we are somewhat at a loss, notwithstanding the title, to determine in what catalogue to place it. According to the dedication, it is an "attempt to give the Science of Medicine a wider range in the mental operations of the age," in the shape of a "Dissertation on the Practice of Medicine." In his advertisement, the author confesses that a great object with him was to present himself "to the best advantage before the MEDICAL PROFESSION."

His manner of exercising this laudable ambition is, to say the

least of it, a singular one, and altogether novel in this particular relation. The means he has adopted, however, with sorrow be it said, are now-a-days only too familiar; not in the hands of truly scientific men, but in those of the very charlatans whom his book was put forth to overwhelm, and whose boast it is to stand ever worst instead of best in the esteem of legitimate practitioners and teachers. But more of this directly.

The author informs us further, in the same advertisement, that his "work is in its nature ephemeral," and that he "does not claim for it a place among the standard works of the day." And whilst he tells us, what is sufficiently apparent, that he has made very few acknowledgments to authors, he very generously hints, that should the reception of his bantling "warrant it, he hopes to live to remedy some of its defects, and especially to do justice to the labors of others."

We are disposed to be duly thankful for these good intentions, and freely join with him in the hope of his surviving for the task; but we quite as much regret that he has not taken the time and trouble to apply the remedy, and do the justice promised while time was yet his own, were it only for the benefit of those into whose hands the first edition is to fall. We say this in all sincerity and seriousness; for apart from the absolute inadmissibility of the stereotyped excuse (not offered in the present instance) of the pressing occupations of an extensive practice, &c., &c., in an avowedly systematic work, whether ephemeral or not, we think that for the sake of the unprofessional readers to whom the "dissertation" is in part addressed, if not for that of the highly respectable body of gentlemen to whom it was dedicated, it should not have been allowed to appear without a far more complete revision than it seems to have received.

Although written in a generally clear, correct and sometimes forcible style, it is sadly disfigured with errors of medical orthography, if not of erudition; and we honestly believe that if the importance of emendation and correction is to be the motive for a new edition, the sooner the first is exhausted, the better it will be for all concerned.

If there were reason to doubt the character of the work before us, the advertisement above alluded to would dissipate it at once. The grand design is to illuminate the country, and thus to make

an impression on "the age," which shall redeem and disenthral the human family from the shackles of quacks and quackery, and drive the whole herd out of every field, by rendering, henceforth and forever, "every man *their* own doctor."

This may be a novel and impressive enterprise in the author's own locality, although we are loth to believe that any State of the Union is yet so far behind the times. At any rate, we understand that the same thing has been tried here and elsewhere on this side of the Atlantic, and may be tried again. We are also under the impression that it has occasionally been thought of among the more sophisticated people of the old world; but we have yet to learn that the mixture, pill and powder business has suffered much decline therefrom; or that Catholicons and Panaceas, Poor Man's Plasters, or any of the whole range of the *Materia Medica Arcana* have lessened in demand or ceased in giant growth.

To use the Doctor's own words, after stating his desire to present himself well before his professional brethren, he says:

"It was my purpose to shew them, that the time had arrived, when a diffusion of medical knowledge among men, was necessary to the continuance of their confidence in the science, or its professors; that the decline of that confidence which is manifest in this day of increasing civilization, has arisen from the vain attempt to make medicine an exclusive property in the hands of those who pursue it as a profession; that the belief of every preposterous theory so readily entertained, and the sport with human life now carried on so widely under courses of treatment as opposite as they are destructive, are cherished and kept up by the same cause; that instead of putting down the quack, this exclusive system is the rampart behind which he stands in safety, and makes more by the random fling of ignorance and rapacity, than the most gifted of his adversaries by years of study and labor; and, finally, that it would be greatly to the credit of medical men, and profitable to the whole profession, to throw open the doors of their science, and by all practicable means induce mankind to consider it their duty to obtain some knowledge of it for themselves."

This is the sum and substance of an introduction for which the advertisement was substituted, and which was nipped in the bud by an attack of illness of the author.

This has proved an unfortunate extinguisher, inasmuch as a fuller explanation of his views would have given us, perhaps, a more

favorable idea of him and of his position, and in that way might have saved many of his readers from doing him injustice. We cannot agree with him, however, so far as we can understand him, nor can we for a moment say anything in approval of the course he has pursued and advocated in the preparation of his work. We cannot see, and certainly have not as yet been shown, how the people are to be qualified to practice medicine, or to aid the practice, with an ill-digested and extremely superficial series of instructions in regard to the general character of certain diseases, injuries and conditions of the human frame, accompanied with similar instructions as to their general modes of treatment, and the application of special remedies—all comprised in one octavo volume of 725 pages. This single book, too, be it remembered, without a single line about anatomy, physiology, or the philosophy of health, is to prepare a man to appreciate the value of his medical attendant's prescription; in other words, to scrutinise and criticise, perchance to modify the latter's practice on himself and all his friends and neighbors.

We have no desire longer to abuse the good sense and patience of our readers by dwelling on this subject, nor do we feel called upon to enter upon a critical analysis of a work, whose whole tendency we are obliged to condemn. We therefore take our leave of Dr. Fort, with the hope that in the preparation of his next edition he will not, in his anxiety to teach the bedarkened public, so far lose sight of his strictly scientific friends, as to devote his evidently superior abilities and great experience to the production of another hybrid composition, of a class in which he has already been preceded by so many competitors, who will be only too happy to be honored with such respectable company.

THE MEDICAL EXAMINER.

PHILADELPHIA, SEPTEMBER, 1849.

DISAPPEARANCE OF THE CHOLERA FROM PHILADELPHIA.

Health Office, Philadelphia.—At a meeting of the Board of Health, held to-day, [Aug. 20,] the following preamble and resolution were adopted:

Whereas, in the opinion of the Board, Cholera no longer exists in the community as an epidemic; therefore,

Resolved, That "Daily Bulletins" will no longer be issued by this Board, unless our city and county should be visited by a return of "epidemic cholera."

By order of the Board.

SAMUEL P. MARKS, Clerk.

Under the authority of the above official notice, we are happy to announce the entire disappearance of the Epidemic Cholera from our midst. The citizens of Philadelphia have great reason to congratulate themselves that they have been so lightly visited. We believe this exemption to be owing in a great measure, under Providence, to the energetic and unceasing efforts of our Sanatory Boards in providing and maintaining guard against the inroads of the pestilence, faithfully supported and assisted as they have been by the municipal authorities and the medical profession.

To the last it is especially a subject of rejoicing, that, for a season at least, they may rest from their labors. During the time of trial among us they have been "instant in season and out of season," ready at all times, without thought of self, to fulfil the unusually arduous duties of their calling.

Circumstances beyond our control have prevented us from presenting a comparison of this epidemic with that of 1832. We hope to do so in the October number.

ST. JOSEPH'S HOSPITAL.

An admirable charity, having the above title, has recently been chartered, and has commenced operations in a most eligible locality in the vicinity of the city.

The Hospital has been placed in charge of the religious order of the *Sisters of St. Joseph*, who by their vows make attendance upon the sick a part of their duty.

Although under the auspices of one religious denomination, this institution does not limit its good work to that communion alone, but as its charter indicates, "its benefits and advantages shall be extended to the sick, without reference to *creed, country or color*." It is contemplated that the buildings when completed will accommodate one hundred and twenty patients, who, for the moderate sum of three dollars per week will obtain all the comforts needed by the sick, to be obtained in private houses at five. For every five of these pay patients, it is proposed to receive one beneficiary.

The medical staff, comprising some of our most eminent physicians, are as follows: W. E. Horner, M. D., Samuel Jackson, M. D., Alfred Stillé, M. D., W. V. Keating, M. D.

To the Editors of the Medical Examiner.

GENTLEMEN:—While many others are engaged in inventing new theories or reviving old remedies for Cholera—in describing the wonderful phantasmagoria of Microscopic Anatomy, or roaming through the Elysian fields of Anæsthetic Medicine, allow me to solicit a little information, on a smaller matter, through your valuable journal.

You, or some other member of the profession, can confer an important favor on many of us, by informing us how we may preserve our gum elastic catheters and bougies from the influence of the warm summer weather. I have been buying gum elastic catheters and bougies occasionally for the last twelve years, and have seldom found it possible to preserve them fit for use through the following summer.

As soon as the weather grows warm the elastic gum coating begins to soften and they adhere to each other, to the side of the case, or to whatever other substance they may be enveloped in. When separated by force, the polished surface is destroyed and the catheter or bougie left entirely unfit for use. If a number of them be left lying in contact, they become glued together so firmly that it is impossible to separate them without tearing the gum coating off. If kept separate, they soften and adhere to anything that I have been able to place them in contact with, in defiance of oils or unguents. Whether the fault is in the particular manufacture I have received, or whether all are liable to the same objection, I am unable to say. Out of about three dozen catheters and bougies purchased at different times and from different druggists, I have not one now fit for use, though I have never made any use whatever of two-thirds of them, and have tried diligently to preserve them. A friend of mine succeeds by keeping them in a cool cellar, but many of us have no cellars.

This is a source of much inconvenience to me, as well as other country practitioners, as the diseases of the urinary organs requiring their use are of a most painful and troublesome character, and not of unfrequent occurrence. Could not some improvement be made in them that would obviate the difficulty? Or, if not, could not the gutta percha, or some other article, be substituted for the gum elastic?

Yours respectfully,

C. J. CLARK, M. D.

Jacksonville, Ala., July 22, 1849.

[In reply to our correspondent, we can only say that the same difficulty has occurred to practitioners in this section of country. To a certain extent it may be remedied by keeping the catheters and bougies in an air-tight tin box, having previously dusted them over with finely-powdered starch, (ordinary hair powder,) which can readily be wiped off before using them.

It is doubtful whether the gutta percha could be substituted for the gum elastic, for although flexible, it does not possess sufficient elasticity for the purpose proposed. It might, perhaps, be advantageously combined with caoutchouc. We would be pleased to hear from any of our readers who can inform us further on this subject.—Eds. Ex.]

ARMY MEDICAL DEPARTMENT.

On the 15th of October a Medical Board will assemble in Philadelphia, to examine candidates for the post of Assistant Surgeon in the army, of which there are several vacancies at present, as well as to provide for filling such vacancies as may occur during the year. The Board will continue in session two weeks. Applications for the post, or for permission to appear before the board, must be made to the Secretary of War, accompanied by testimonials as to moral character. Candidates must be between twenty-one and twenty-eight years of age.

PENNSYLVANIA HOSPITAL.

Dr. C. D. MEIGS has resigned the post of Physician to the Lying-in Department in this Institution, and Dr. JOSEPH CARSON has been elected in his stead.

Dr. Carson brings to the appointment a large fund of experience, having been long and successfully engaged in this branch of his profession. We rejoice that the loss of Dr. Meigs' valuable services has been so well met in the election of his successor.

CHOLERA—DR. BIRD AND HIS SULPHUR PILLS.

It appears that Dr. Bird is about to distinguish himself still further, in his much vaunted specific—sulphur.

His pills, it seems, have shown themselves a trifle too potent, having produced in a young lady, at Detroit, in addition to the arrest of the diarrhœa, unmistakable narcotism—an effect hitherto, we believe, never attributed to sulphur.

The Detroit Free Press, for June 16, contains the following curious statement, by Dr. Z. Pitcher, respecting the Chicago Remedy :

“I was called,” says Dr. P., “to see a young lady, quite indisposed, whose symptoms were so analogous to those produced by a full dose of opium or morphine, that the inquiry was at once made of her friends whether she had taken a narcotic in any form, within the last few hours. Both by them and herself I was assured, that the only medicine she had taken in several days was one of Dr. Bird’s sulphur pills, the evening before, to arrest a diarrhœa, which it had done very effectually.

“I am so strongly impressed with the idea that the symptoms of narcosis were occasioned by the pill, that I have obtained two others from the same source.”

These last two, unfortunately for Dr. Bird and the sulphur, were submitted to A. R. Terry, M. D., who, upon chemical analysis, says he discovered *a notable portion of morphia*, or one of its salts! Dr. Terry, not satisfied with this, went still further, and “took,” says he, “the pains to trace these pills, and have the strongest reasons to suppose—nay, I am sure—that they came from Dr. Bird, of Chicago, himself.”—*Western Journal of Medicine and Surgery*.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

On the Neck as a Medical Region, and on Paroxysmal Paralysis.
By MARSHALL HALL, M. D., F. R. S., &c.—When I contemplate the nervous, vascular, and muscular structures of the neck, with their relative positions and varied functions, I am astonished at the fact, that in their physiological actions they are never found to interfere materially with each other. I am not the less struck with another fact, that in their pathological conditions these interruptions should so constantly occur, and yet that they have hitherto escaped, in great measure, the observation and attention of physicians.

An athletic person may carry an enormous weight on his head, accurately balanced by the action of the muscles of the neck, without the slightest interference with either the nervous or vascular structures so diffusely and variously spread over this region.

But let *pathological* action, the result of emotion, or excito-motor energy, occur, and then interruption of the course of the blood, and nervous action, the most dire and terrific, ensue.

I have adverted to the nervous, vascular, and muscular structures along the neck; but another element remains to be added; this is the *larynx*, the morbid actions of which, viewed both as effects of preceding causes, or the cause of ulterior effects, are full of the deepest interest.

Nor ought I to omit entirely to notice the pharynx and œsophagus as belonging to this region, and contributing their own influence to the *Class* of morbid phenomena, of which it is the seat.

As remoter organs intimately associated with the pathological actions of the structures in the neck, I must chiefly notice the medulla oblongata and the cerebrum, on the one hand, and the lungs on the other, and especially in their varied relations to comatose, spasmodic, and asphyxical affections.

When the surgeon contemplates the anatomy of the neck, his attention is principally directed to the *arteries*, which may become the subjects of his anxiety and care in practice, whether wounded by accident or diseased by morbid processes, or to be avoided in an operation.

But to the physician, the *veins* of the neck are the chief objects of interest. If morbidly compressed, and their blood impeded in its course from the encephalon, many diseases of the utmost moment are the painful and even terrible result.

The larynx and trachea may be said to present objects of the deepest interest both to the physician and surgeon, being equally the seats of disease and of accident, of medical treatment and of surgical operation.

The physician has only to observe the various movements of the eyeball, of the features, of the tongue, of the lower maxilla, of the neck, of the larynx, of the pharynx, &c., to arrive at the conclusion, that in the various spasmodic diseases there is no muscle which may not become, singly or together with others, the subject of spasm.*

This principle being admitted, it is only necessary to observe, further, what must be the effect of each of such spasmodic actions, to comprehend the cause and nature of the various symptoms—effects of these—which characterize these diseases.

In estimating the value of this subject, we must bear in mind the principle which has been already enunciated, viz., the difference between the well-balanced and harmonious *physiological* actions of the neck, and the abnormal, morbid, and discordant actions of these same muscles in disease, with their *pathological* effects on the subjacent or contiguous structures.

Let us contemplate in this manner the effect of morbid and irregular action of the platysma-myoides, and of the cleido-mastoid and omohyoid muscles, on the subjacent external and internal jugular veins respectively.

And shall we leave the arteries and nerves of the neck out of the question, as uninfluenced by these abnormal muscular actions?

But I can impart no idea of the interest attached to a careful observation of the condition of these *veins*, and thence of the capillary vessels, and of the arteries; in a word, of the whole *arrière* circulation, in cases of morbid action of the muscles of the neck.

The external jugular and the frontal veins; the color of the cheeks, of the eye and internal eyelid; of the prolabium; the temporal artery; present the phenomena of impeded venous circulation in the most marked degree.

These different points in the cephalic circulation should be examined with the care with which we are wont to examine the conditions of the pulse. The neck should be laid bare, the under eyelid should be everted, the temporal artery should be carefully felt.

One anxious mother could *foretel* the epileptic seizure in her daughter, by observing the fulness of the veins of the neck. One lady observed these veins occasionally to acquire the size of her finger. A medical gentleman drew my attention to the congested condition of the conjunctiva of the under eyelid in his own case. Many patients have presented a cord-like tension of the temporal arteries.

All these phenomena constitute links of the same chain; the first link being compression of the venous trunk by the irregular contraction of the muscle or muscles seated immediately above it; and the last, perhaps, a paroxysmal threatening or seizure.

It may be laid down as a principle, that there is no muscle—no set of muscles—in the neck, which may not become spasmodically con-

* It is doubtless to some obscure movements of this kind observed in the countenance, the neck, the fingers, &c., in infants, that nurses have given the designation of "inward fits."

tracted, and that there is no vein in this region which may not, under the influence of such contraction of muscles, become compressed, and the course of whose blood may not be impeded or arrested. Let us consider the further effect of such compression on the tissues or organs of the head or neck. We shall be led to consider a novel and very interesting question in the pathology of the nervous system. One circumstance must be carefully remembered—the effect of interrupted return of blood along the external jugular is, from its connexions being superficial, far more observable than that of a similar interruption in the internal jugular or vertebral, which can often only be inferred from the symptoms.

I now proceed to consider this subject more especially in regard to certain characteristic affections of the nervous system, which I believe to be at once overlooked, and yet of great importance and prevalence.

We have all heard much of the *tendency* of blood to the head, a condition of the circulation which, in reality, scarcely exists; and we have scarcely heard of *impeded return* of blood from the head, an event of most frequent, nay, of daily occurrence. In reality, I believe the latter affection has been mistaken for the former.

There is no principle in physiology which could induce or explain tendency of blood to the head. M. Poisseuille has irrefragably shown that the power of the heart is equal in all the bloodvessels of equal size, and of equal distance from the heart. Nothing can influence this force except position, exercise, or muscular effort, or hypertrophy of the heart itself, which may augment the rapidity and force of the circulation; but then this augmentation of the rapidity of the circulation is general and diffused, like its original force, equally in all the vessels of equal size and form, and at equal distances from the heart.

Widely different is the course of impeded flow of the blood along the veins. An individual vein may be compressed, and the flow of blood along its course, and its return from the organ in which it originates, is impeded; the capillary vessels, or, as I would term them, the methæmatus channels, are gorged and congested, and the arteries become rigid and throb.

This state of things is conceivable. But this is not all. It is of the most frequent and daily occurrence. And here again I beg to adduce a view of the subject which I believe to have been overlooked. *It is a newly discovered principle in pathology.*

We have only to watch the condition of the platysma-myoides, and of the external jugular vein, to observe that the contraction of that muscle is frequently spasmodic, and the dilatation of the vein, and of the veins which lead to it, a constant effect.

Spasmodic action of the muscle, then, may tend to the obstruction of the course of a vein, and to consequent congestion of its roots, and of the blood channels, to which it serves as a drain.

I must be allowed to repeat, that this action of the muscles must be abnormal and spasmodic, for, as I have said, normal muscular action does not produce this effect. All the muscles of the neck, for example,

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I must be allowed to repeat, that this action of the muscles must be abnormal and spasmodic, for, as I have said, normal muscular action does not produce this effect. All the muscles of the neck, for example,

may be summoned into normal action of the most energetic kind, as in carrying a heavy load on the head, without producing this effect. But let this action be abnormal, irregular, spasmodic, violent therefore, and without equipoise, and a very different result is observed; the subjacent vein may be compressed, and all the consequences of such compression may occur, viz., distention of its roots, and of the blood-channels, placed intermediately between them and the corresponding branches of arteries, which latter become rigid and throbbing.

Another pathological principle must be adduced in this place. Let any one observe the eyes, the countenance, the tongue, the neck, the hands, &c., in spasmodic disease. They will be satisfied that there is no individual muscle, no series of muscles, which may not be excited into abnormal and violent, because spasmodic action. There is consequently no vein within the influence of such action which may not be compressed. As a further consequence, there is no organ which delivers up its blood to such vein, which may not be the seat of congestion, and, if I may so express myself, of the apoplectic state.

Now, in the region of the neck there are *four* veins of vast importance in this point of view; these are—

1. The External
 2. The Internal
 3. The Vertebral;
 4. The Subclavian.
- } Jugulars;

Now, the external jugular is compressed by the action of the platysma-myoides; the internal jugular, by that of the cleido-mastoid and the omo-hyoid muscles; the vertebral and the subclavian veins may be compressed, and the course of the blood in them impeded or arrested, by the spasmodic action of the scaleni, the subclavius, the pectoralis minor, &c.

To show the influence of abnormal contraction of the muscles on the subjacent or adjacent veins, I may mention the fact, that even the pulse of the artery at the wrist may be stopped by violent voluntary action of the pectorales minor, and other muscles similarly seated.

The compression of each of these veins induces its own peculiar effect.

The external jugular is frequently compressed by the action of the platysma-myoides, the effect of emotion, and blushing is the consequence; in other cases, the superficial veins of the neck, face, forehead, temples, &c., are seen to become tumid, the face to flush, and the temporal arteries to throb.

The internal jugular may be compressed without any obvious external sign, its roots being deeply seated. But the brain suffers, and there may be one or more of the varied symptoms of *cerebral* epilepsy—that is, momentary loss of consciousness, affection of the vision, or ringing in the ears.

If the vertebral vein be obstructed, there are some of the symptoms

of affection of the medulla oblongata, or of *spinal* epilepsy—that is, laryngismus, strabismus, odaxismus, twisted neck, &c.

Lastly, when the subclavian is compressed, the hand of the patient becomes livid and cold. Such an event I have just witnessed, and, indeed, watched, in a little patient conjointly with Mr. Hodding. The lividity and its accompanying coldness alternated with return of the natural color and warmth from time to time, as the action of the subclavian (as I suppose) varied.

Some action of this kind also doubtless affects the mamma and the nipple, under the influence of what is called “the draught,” and of the erectile excitement of the nipple on the pressure of the lips of the infant.

Other glands may be affected in a similar manner, excited, or arrested, by similar means, especially the salivary.

The subject of impeded venous circulation is not exhausted. It is physiological as well as pathological, though most frequently the latter, and always traceable to emotion, or excitants of reflex action, and the *Spinal System*. Once more a new field of inquiry opens upon us.

It must be here observed, that compression of the subclavian vein may affect, not the brachial vein only, but, in a secondary manner, the vertebral and the jugulars; and it is to be particularly borne in mind, that the veins of this region are not affected *singly* in the manner I have described, but variously together.

I repeat that, in spite of anything which I may have written, or may write, respecting the action of individual muscles on individual veins in the neck, *it is not by any regular and physiological convulsion, but by irregular abnormal and violent GROUPING and CONTRACTION of the muscles of the neck, that compression of the veins of this region become variously affected with its consequences.*

I have now to evolve a fourth pathological principle in relation to this subject. The actions of the muscles to which I have adverted being one and all spasmodic or convulsive, the effects of this on the veins, and more remotely on the cerebrum, or on the medulla oblongata, are—*paroxysmal*. And this remark leads me to mention, in the most emphatic manner, that not only coma in the apoplectic state, but hemiplegia and partial paralysis, and mania, may, as well as epilepsy itself, be paroxysmal, be dependent on intra-vascular congestion, and exist entirely independently of extra-vascular, or other physical change. They may be evanescent, therefore, and so, far, very far, less grave than other forms of these diseases.

I feel that this subject, in all its relations to its causes, its rationale, its prognosis, is of vast importance in medical science and art.

Emotion and causes of reflex action may induce contraction of the muscles of the neck—*trachelismus*. This may compress the veins of the neck, and induce a condition which may be designated *phlebismus*. This leads to congestion of the intermediate blood-channels and the apoplectic state; and this, primarily or secondarily, to comatose, to paralytic, to maniacal, to epileptic affections, all having the one characteristic feature—that of paroxysmal and evanescent forms. I imagine

that this view of the subject is equally original, important, and extensive. The events of each day's practice prove that these paroxysmal forms of diseases of the nervous system, not formerly viewed as paroxysmal, are extremely frequent. In fact, I believe a new ray of light is being shed on apoplexy, and even on paralysis and on mania, in their varied forms,—in a word, on a *whole Class* of paroxysmal diseases.

I would here specially remark, or repeat, that impeded flow of blood along the external jugular is seen, first, in the fulness of this vessel itself; second, in that of the intermediate blood channels; and third, in that of the temporal artery; and that the effects of compression of the subclavian are seen in the lividity and coldness of the hands and fingers; but the *arrière* connexions of the internal jugular and of the vertebral veins are more deeply seated, and impeded circulation in these vessels is manifested chiefly by *symptoms*—the symptoms of cerebral and of spinal epilepsy respectively.

I may now ask an important question—What are the exciting causes of trachelismus and its phenomena? And I answer, first, emotion; and second, the excitants of reflex action—new subjects of investigation and study in the science and art of medicine.

I am quite aware that neither the professional nor the public mind—they are, indeed, nearly on a par—are raised sufficiently for views so “rational.” But, then, I do not write for the present day; and the day will come—and I shall promote its advent—when medicine will form a Science, based on physiology, and calling in the aid both of theory and of observation. These fountains of science will be viewed as allies, not as opponents, and we shall have our Adamses as well as our Hinds, even in medicine. The great Louis, in devoting himself to *observation*, and rejecting the *dreams* of Broussais, would be the last to oppose just and legitimate *theory*. It is strange, that in the nineteenth century we should be gravely urged to look and listen, but not to reason or to think; to observe, and yet not to experiment, not to theorize. Besides, theory, and even hypothesis, leads to observation, by teaching us how and what to observe. The hypothesis of a planet exterior to Uranus led to the detection of Neptune. What reflex actions were noticed formerly? Yet who, except the prejudiced, fail to observe them now?

I here conclude this little sketch, but not without one or two final practical remarks.

There is no degree or form of apoplexy or mania which may not be paroxysmal, and dependent on trachelismus. This is also true of paralysis. One patient suddenly and completely lost the power of articulation at one time, and of writing at another, to recover them after an interval. Another patient lost the power of articulation; a second, the use of the arm, and a third, the use of both arm and leg, yet only for a time.

In most of these cases, but not in all, the paralysis is not only paroxysmal, but more or less combined with spasm—that is, they are not cerebral only, but spinal.

The difference between these paroxysmal forms and the permanent forms of this Class of disease, will now be perceived to be immense. They are especially more curable.

The objects forming this class are far more intimately allied than has been supposed; apoplexy, paralysis, mania, have alike resulted from an epileptic seizure. Minor degrees of the former have occurred from milder degrees of the latter; and even in the entire absence of epileptic symptoms. But to the physiologist there is a bond of union between them all. All may equally, and conjointly or separately, arise from emotion or the excitants of reflex action; from the occasional effects of these inducing contraction of the muscles of the neck, of this on the reins, of this again on the capillary circulation, of this on the condition of the cerebrum, and of the medulla oblongata—whence the Class of paroxysmal, cerebral, and spinal diseases.

Before I conclude I must make one further remark on the structure of the veins of the neck. These are so provided with valves at their conjunction with the subclavian as to cut off the influence of the venous circulation in the fore-arm and arm. Without this provision, each energetic use of the anterior extremity, as when the blacksmith raises his heavy hammer, or strikes with violence on the anvil, would be attended by a blow or shock to the cerebrum, or the medulla oblongata.

One more remark, which I owe to Mr. Hilton, of Guy's. The subclavian artery and vein are protected from the ordinary and normal action of the subclavian muscle by a firm fascia. It is only in its violent abnormal and spasmodic action that the hard and tumid belly of this muscle is made to compress the subjacent vein.

I have, on a former occasion, drawn the attention of the profession to the important distinction between paralysis and spasm-paralysis. In this paper I have, I think, done a service to my profession by calling its attention to *paroxysmal* paralysis, as well as to other paroxysmal affections of the nervous system. These two forms of nervous affection may be combined in the same individual, or occur separately, and present a subject for careful investigation.

I have also noticed cerebral epilepsy. This affection is nearly allied to the paroxysmal form of apoplexy.

As to paroxysmal mania, it is similar in nature to the mania which succeeds to a fit of epilepsy, only occurring without epileptic phenomena.

The principles of treatment embrace the *prevention* and the actual *remedy*, and consist in avoiding or removing causes—1, of emotion; and 2, of reflex action. I must not on this occasion enter into particulars.

I conclude by the following brief recapitulation of the topics thus briefly discussed for the first time in medical literature:—

1. Emotion and Excitants of Reflex Action;
2. Irregular and Inordinate Contraction of the Muscles;
3. Compression of the Veins;

4. Congestion of the Organs en arrière ;
 5. Cerebral and Spinal Paroxysmal Diseases—viz.,
 6. Paroxysmal Apoplexy, Paralysis, Mania, Epilepsy, occurring singly or consecutively.—*London Lancet.*
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MANCHESTER PATHOLOGICAL SOCIETY.

Abscess of right Corpus Striatum—irritation and inflammation of the membranes of the brain, with effusion of lymph at the base—Absence of paralysis, or other symptoms, until within twelve hours of death.—Mr. FARR presented the brain of a young woman, 19 years old, of which the right corpus striatum and parts adjacent were broken down and excavated by chronic abscess. Extensive effusion of lymph and serum had taken place into the ventricles. On section through the corpus striatum, upwards of an ounce of grass-green colored pus, mixed with softened brain, flowed out. The convolutions were flattened, as from too great compression. The arachnoid covering the hemispheres was dry. The pia mater had not the appearance of congestion. The dura mater adhered with unusual firmness to the skull. Concrete lymph was effused into the sub-arachnoid cellular tissue, around the medulla oblongata, pons varolii, cerebellum, and optic nerves. The girl had syphilis, but with this exception all the other viscera of the body were healthy.

She was a prostitute, and had been admitted into one of the sick wards of the Manchester union workhouse, suffering from diarrhœa. She was addicted to drinking, had a small appetite, and bore a reputation for cheerfulness and liveliness of disposition.

On the night preceding her death, she retired as usual, but became restless, and frequently got in and out of bed without assigning any reason for the act. Sickness and diarrhœa set in, and at nine o'clock in the morning convulsions of the entire body occurred, and lasted a quarter of an hour. The right eyelid remained closed, and the pupils were dilated and disobedient to light. At ten o'clock the convulsions returned, the right arm on this occasion being more agitated than the left; breathing slow and slightly blowing; pulse quick and feeble; skin of natural warmth. By six o'clock she was perfectly insensible, and at seven she died.

Attention was called to the previous history of the girl, and the known fact of her cheerfulness up to the day of admission, and subsequently.

The diarrhœa under which she suffered differed in nothing from the severe autumnal purging then so common all over Manchester. The first clue to the disease in the brain showed itself in the restlessness and getting in and out of bed,—a symptom noticed by Mr. John Bell in connection with abscess of the brain following injuries of the skull. The convulsions, dilated pupils, and the apoplectic coma that followed, seemed to receive an explanation on the acknowledged principle that they may be, and indeed frequently are, caused by pressure, or the irritation that follows the tearing of the white fibres of the brain; and

it is presumable that on the morning of these occurrences the abscess of the corpus striatum gave way into the ventricles.

The dryness of the membranes covering the cerebral hemispheres, the lymph effused around the base, and the flatness of the convolutions, bespoke alike the pressure and irritation that had been silently endured.

Perhaps the most remarkable feature of the case was the abscess in the corpus striatum, which failed to produce any recognised symptoms by which the least suspicion of disease could be aroused, although it must have existed some time.

As it is customary now to look upon the corpora striata as the anterior cerebral ganglia of the spinal chord, through which the white fibres of the brain pass from the hemispheres, and descend to form the motory tract, receiving a stimulus in their passage through these bodies, it would seem conformable to physiology that so serious a pathological lesion should have been more manifest. To quote from Mr. Solly—"I believe it is an invariable fact, that extravasation into the corpus striatum is followed by paralysis, and consequently there is no portion of the brain that pathology has so clearly indicated the function of, as the corpus striatum, in so far as volition and the production of voluntary motion is concerned." Other pathologists have rendered like testimony.—*London Medical Gazette*.

Suggestions on the treatment of Cholera Patients, addressed to the Parochial Boards jointly by a committee of the Royal College of Physicians and the Royal College of Surgeons of Edinburgh, and Dr. Sutherland, the Commissioner of the General Board of Health.—I. At the district dispensaries there should be kept, not only the medicines, but the other materials requisite for the treatment of the disease, in the houses of the poor,—such as straw-mattresses, blankets, vessels for heating sand or salt, spirits of turpentine, and cloths for applying it, mustard for cataplasms, coals and wood for firing; but these are to be given out only on the orders of medical men who have seen the patients. There should also be the necessary messengers, materials for fumigation, and the means of conveyance to hospital.

II. On an application to one of these dispensaries from a patient reported to have diarrhœa, the attendant will proceed thus:—

1. He will issue directly twelve of the pills containing opium, hereinafter specified, with directions to give two immediately, and repeat them every three hours while the diarrhœa lasts; but if there be along with it vomiting or cramps, every hour while these symptoms last, until the medical man arrives.—2. He will give directions for applying external warmth by all available means—blankets, hot bricks, hot sand or salt, turpentine, or mustard poultices, on the abdomen and extremities, bottles of hot water laid alongside the patient, frictions with hot flannels, and as warm covering as possible. 3. He will direct that the patient drink nothing for a quarter of an hour after each dose of the pills, but that at that interval after each dose, he take a table-spoonful of spirits with hot water, or two table-spoonfuls of spiced wine; and if his skin is felt to be cold and damp, repeat this every half-hour.

N. B.—In the case of children who are from 10 to 14 years of age, he will be careful to direct half the quantities both of opiates and spirits, and in the younger children proportionally smaller doses. 4. He will give the address of the medical man attached to the district where the patient is, and direct that he be immediately informed of the case, and, if necessary, send a messenger to inform him.

The following pills may be kept constantly at each station, and the medical officers may leave general directions as to the selection of one or other of these in the first issues to the patients:—

℞ Acet. Plumbi, ʒss.; Opii, gr. xij.; Conserv. Ros., q. s. Ft. pilulæ xvi. Sign. Lead and Opium Pills.

℞ Tannini, ʒss.; Opii, gr. xij.; Pulv. Capsici, gr. xvj.; Conserv. Ros., q. s. Ft. pilulæ xvi. Sign. Astringent Pills with Opium.

℞ Calomelanos, ʒss.; Opii, gr. xij.; Pulv. Capsici, gr. xvj.; Conserv. Ros., q. s. Ft. pilulæ xvi. Sign. Calomel and Opium Pills.

The doses of all these should be as above directed. Along with these, in the early stage of the disease, and when the skin is cold and damp, such a stimulating mixture as the following, besides the wine and spirits, may be used:—

℞ Ætheris Sulph.; Spirit. Ammoniae Aromat. ana ʒss.; Tincturæ Cinnamon. Comp. ʒj. (*Misce.*) Sign. Two tea-spoonsful to be taken every half-hour or hour.

III. The medical officers should be reminded of the paramount importance in this disease of early and assiduous treatment and careful watching of the patients, by themselves or trustworthy assistants, *in the early stage*: the object being, if possible, to prevent the patient from falling into a state of collapse, or if he should, to bring on reaction as speedily as possible.

Concurrent testimony is in favour of opium, as the most powerful remedy, provided it be given in *full* and *repeated* doses within the first 12 hours—at farthest within the first 24 hours from the attack—if possible before there is collapse, certainly before there is the tendency to stupor, which is to be expected after the collapse.

When reaction has taken place, and the tendency to stupor shown itself, the farther use of the opium and astringents requires much caution, and the case must be treated as one of febrile disease, particular attention being paid to the quantity and quality of urine passed.

IV. When removal of the patient to hospital is thought necessary, it should be effected in the recumbent posture; and the litter employed should be so constructed and managed, as to secure, as far as possible, protection and warmth during the removal. Litters of this kind are kept at the cholera hospital, Surgeon Square, and at the Royal Infirmary.

V. When the first patient affected in a house, (particularly if crowded, dirty, and inhabited by destitute people,) has been removed or has died, or in the case where some of the members of the family are of no use for the assistance of the patient, the medical officer will consider the advantage of removing the remaining or less useful members of the family—and when the locality is damp or ill-aired, or the cases have occurred in rapid succession, some of the neighbors—without delay in-

to one of the houses of refuge prepared for their reception: experience having shewn that when this measure has been promptly adopted, successions of fatal cases in the same family, such as have already occurred in at least eight of the places where the disease has recently appeared in Edinburgh, have very generally been averted. If this measure is assented to by the family, he will give immediate notice to the officers of police on his return of the case, that the house may be taken charge of by the police, and thoroughly cleansed. Some objection to this measure on the part of the affected families may always be expected at first, but a little explanation, and a little experience of its effects, will very generally surmount the difficulty.—*London Medical Gazette.*

CHEMISTRY.

Cases of Poisoning by Arsenic.—At the Medical Society of London, Mr. Headland called attention to two cases that occurred in his neighbourhood. He was requested, on Sunday morning, to see a child; he found it pale, faint, had vomited largely and purged frequently, pain in the bowels—in fact, the child alarmingly ill. There was no satisfactory explanation of attack. Found the evacuations without colour, like thin gruel, here and there a bloody mark, then blood itself. The vomiting and purging continued until Wednesday, when the child was convalescent. On that day another child in the same family was taken ill, with similar symptoms. In this case there was no pain; the belly was slightly swollen. He was struck with the probability that it was the effects of mineral poison; an investigation took place into the culinary utensils, &c., without being able to account for the cause. The mother, however, stated that the child had been presented with a toy a few days before; it was in the shape of a white rabbit, and had been played with constantly the day previous. The child being timid, the nurse had some difficulty in causing it to place its hand on the toy and rub it, immediately after which the child put its hand into its mouth; during the first child's illness the second child had played with the toy. He examined the toy, and found it dusted over with a quantity of fine white powder, and felt convinced then that he had discovered the cause. He subjected the powder to all the tests for arsenic, which left no doubt that arsenic existed. He wondered at the quantity of powder, but found the greater part consisted of carbonate of lead. He referred to the common employment of arsenic to preserve skins and furs from moths, &c. He had questioned whether the toy was English or foreign; it was stated to be foreign, and was generally infested with moths; this white powder was used to destroy them. It was a hint to the profession to be alive to prevent such risks. In answer to questions, he stated it was clearly not a case of poisoning by lead, as no constipation, colic, or other symptom of poisoning by lead appeared, and the quantity of arsenic need not be large to cause such symptoms. The powder was so fine that it could be readily inhaled as dust. He exhibited a specimen of lead and arsenic derived from four or five grains of the powder.

Mr. PILCHER considered it a most important case, and referred to the different compositions for the protection of furs, and the danger that might arise from ladies' boas and muffs, &c., that they so frequently hold to their mouths, being preserved with a similar powder.

Mr. STEDMAN had seen the different experiments made by Mr. Headland, and considered that he had underrated the quantity of arsenic present. He had frequently seen shopkeepers dust the skins and toys with a white powder, and probably of the same composition.

Mr. DENDY expressed thanks to Mr. Headland for mentioning these very important cases; there was no doubt arsenic in some quantity existed, and was the cause; yet we see, occasionally, symptoms such as those described, caused not by anything of such a deleterious nature. We should certainly be on our guard, and consider that these cases merited every publicity, and should be generally known.—*Dublin Med. Press.*

SURGERY.

On the use of Glycerine in Diseases of the Ear. By THOMAS H. WAKLEY, Esq., Surgeon to the Royal Free Hospital, London.—The anxiety which is always manifested by the public to take advantage of any new discovery or successful mode of treatment connected with the removal of disease, affords a strong proof of the confidence which is generally entertained by the community in the power of medicine as it is practised in this country. In this respect, a marked difference is shown in the conduct of the professional and non-professional portion of society. This is not extraordinary, as afflicted persons naturally seek for the readiest mode of obtaining relief. The medical practitioner, on the contrary, first considers the rationality of any proposed method of effecting a cure. His studies have taught him to reflect and to reason, and the results of experience have admonished him not to form conclusions too hastily, or to generalize too widely from restricted data. But it must not be inferred, that because the medical practitioner is less prompt than the public in resorting to the aid of a new agent, that his confidence in the powers of the healing art is less forcible, or is less deeply fixed in the foundations of his judgment, than is that of the non-professional community; on the contrary, the confidence which he feels is not the offspring of an unreflecting, ill-sustained faith—it is not a weak superstructure, raised upon the narrow basis of a single fact, but arises from, and is sustained by, the broad and solid foundations of science, reason, and experience. It is well for society and the progress of knowledge that the minds of medical practitioners are thus trained and disciplined; for if it were a custom with them, without hesitation and reflection, to adopt and sanction every newly-announced successful plan of treating disease, the subsequent failures, in a great majority of the novel plans, would soon destroy all confidence in the practice of medicine, not only in the public mind, but amongst physicians and surgeons themselves. Probably one of the causes which has tended in

a great degree to establish and sustain the confidence of the community in the practice of medicine, has been the judicious caution which practitioners of eminence have exercised before they have resorted to new means of cure; and secondly, the candor and integrity which they have so often displayed in publishing the results of their experiments and experience. It is honorably felt that much deliberation and caution is due alike to a noble science, to the just claims of society, and to the exalted character of a dignified profession. If every example of the successful treatment of disease, by a new remedy, were to be published, the minds of practitioners, if not strongly fortified by previous study, and habits of thoughtful investigation, would become in danger of being involved in confusion by the dazzling announcements of numberless triumphant experimentalists. It is, therefore, forcibly felt by the profession, that before a new mode of treating disease be recommended, something more substantial than speculation or hypothesis should be available to warrant its adoption. Reflections of this kind have induced me to pause for a very considerable period before I determined respectfully to submit to the consideration of the profession, the humble pretensions which I am desirous of establishing for *glycerine* in the treatment of certain forms of deafness. The strong conviction which I entertain as to the utility and value of this remedy is the only apology I can offer for claiming, even for a moment, the attention of the profession on such a subject. I have no new doctrine to inculcate; no new discovery in physiology to enforce; no "great fact" in pathology to disclose. The sum total of my aim on this occasion is, to contribute a fact to our therapeutic store, which, although it may be regarded by some as a very insignificant item, is one which I think ought to be very generally known. I have already adverted to the confidence felt by the public in the capabilities of medicine, as a practical science, and to the eagerness shown by society to take advantage of any newly-announced medical or surgical remedy. Unfortunately, that unsuspecting desire to seize, with blind faith and hope, on any new proposal for curing disease, is, in this country, the fertile source and support of all those partial, detached, and empirical systems of practice, which are, and ever must be, denounced and repudiated by every well-educated practitioner.

The medical officers connected with the public institutions of this vast metropolis command the most ample opportunities of observing the strong tendencies of the public feeling with respect to the adoption of new remedies. Scarcely is a new fact of any importance connected with the cure of disease published in the periodical journals, when the "out-patients" at the public hospitals make the proposed remedy the subject of common conversation amongst them. Frequently, the applicants for relief even ask to be treated on the "new plan," and sometimes they request to be given some of the "new medicine."

One of the most striking instances of the lively effect produced by the first announcement of a "new plan" of treatment, was afforded, in the summer of last year, by the publication, in *THE LANCET* for July 1, 1848, of the first of a series of valuable papers by Mr. Yearsley,

entitled, "On a New Mode of Treating Deafness." Immediately after the appearance of those papers, an influx of a new class of patients was observable in the Royal Free Hospital. The members of that new class of persons were afflicted with deafness, and often was the remark made by them, "I wish, if you please, to be treated upon the new plan;" or the question was asked, "if there had not been discovered a cure for deafness?" Such inquiries from patients suffering under actual disease, many of whom stated that they were deprived of the means of obtaining a livelihood, in consequence of their infirmities, suggested the questions—"What ought the surgeons of a public general hospital to do, under such circumstances?" "Ought these patients to be rejected at this place, and transferred to the institutions specially devoted to diseases of the ear?" It appeared to be just that the patients should be received.

Accordingly, I resolved to attempt to confer a benefit on the applicants, by adopting and following out the plan of treatment recommended by Mr. Yearsley; and this resolution was carried into practice with results which rapidly increased the number of expectant patients. Would it have been right, I ask, to refer such patients to other institutions by rejecting their supplications for relief, or, worse still, to consign them possibly to a class of not over-scrupulous practitioners, who profess to work miracles, but fortunately whom medicine does not claim, or in any manner recognise, as her legitimate children. Let it not be considered, from these remarks, that I deprecate a division of labor in the practice of medicine and surgery. On the contrary, I distinctly acknowledge, that an intense scientific application devoted to "specialties" in the investigation and treatment of disease has been productive of highly useful and important results. At the same time, such divisions of labor cannot, in my opinion, justify the surgeon of a public hospital in neglecting the consideration and treatment of any class of diseases which properly fall within the field of his observation. I need not dwell upon the importance of the sense of hearing. Why should a surgeon admit that a disease of the eye or the tongue properly demands his interference and best attention, and then altogether reject as unworthy of notice or consideration the deranged structure of the organ of hearing. The principles of diseased action are the same in all the vital organs, although peculiarities of tissue produce different morbid results.

During the existence of the first flush of success, the value of Mr. Yearsley's new method of treatment may have been over-estimated. This was not his fault; and the fact cannot be disputed, that Mr. Yearsley openly and candidly submitted his views to the notice of the profession. However, it happened that poor patients, in considerable numbers, claimed, at the portals of the public hospitals, to be recipients of the advantages of the new discovery, and I then thought, and still think, that it would have been ungracious and unfeeling to have rudely directed the sufferers to apply elsewhere for relief.

The adoption of the plan of treatment recommended by Mr. Yearsley was an appropriate recognition of the value of his labors. The success which attended the use of the simple operation which he recommended

was, as I have already remarked, very striking in the first instance. In several cases, the effect of the application of the wetted cotton, in which the tympanum had been perforated by ulceration, was even extraordinary. But it too frequently happened, that the relief obtained was of an ephemeral duration. On applying the wetted cotton, the power of hearing, in several instances, which had been lost for a very long period, was instantaneously restored—an event which excited the most profound astonishment in the minds of patients and their friends. Too soon, however, was it perceived that the newly-acquired power gradually subsided, and the sense of hearing returned to its previous imperfect condition. The relapse frequently produced a feeling of dejection in the spirits and hopes of the patient which it was painful to witness. The benefit derived from the application, in the first instance, was undoubted, and could not be mistaken : hence arose the question—Why was it of so evanescent a character ? This inquiry naturally suggested a minute investigation into the nature of the materials employed, and also their immediate and remote influence on the parts to which they were applied. A brief investigation, a few experiments, and an attentive consideration of the subject, induced me to attribute all the conferred advantages to the effects produced by the water, and to reject the cotton as nearly, if not entirely, useless. It even appeared that after the water had evaporated, the retained dry cotton became an additional impediment to the function of hearing. What was to be done ? What were the indications which such facts seemed to establish ? Evidently the use of some agent, which, by offering a successful resistance to evaporation, should retain its moisture, and continue to lubricate the auditory canal. Clearly enough, it was from the moisture that the benefit was obtained, and from a continuance of the moisture was the advantage to be prolonged. On duly considering all that I had observed, it appeared to me that *glycerine* was the only agent which was at all likely to accomplish the object I had in view. After consulting with Mr. Lloyd Bullock, of Conduit-street, relative to the composition and properties of glycerine, my opinion as to the propriety of giving it a trial was confirmed ; and Mr. Bullock kindly manufactured for me a small quantity of the preparation in its purest form. This portion I obtained from Mr. Bullock in the first week of August, 1848, and employed it immediately in several cases, with apparently the most complete success. One of the patients, aged nineteen years, was a relative of Mr. Braithwaite, the celebrated engineer. In this instance the deafness had existed from infancy. Reports of four of these cases will be found amongst those attached to this paper. They were the first I treated with the new agent. In all these patients the wetted cotton had failed to produce a lasting benefit. Two of the four patients are now completely cured ; and the other two are so far recovered as only to find it necessary to resort to the glycerine at distant intervals. The success of the new remedy, in these and many other instances, has attracted much notice ; and I have now used the glycerine in upwards of three hundred cases of deafness. On many occasions it has been employed without any advantage whatever. In other instances the

benefit was considerable for a short time, and then disappeared. In numerous cases, however, by the use of it, the power of hearing has been completely restored.

It was only after much experience in the application of glycerine, and from observing its action in a great number of cases, that it could be ascertained what were those conditions of the ear in which it was most likely to prove of advantage. Contrary to what might have been anticipated, the use of the remedy was successful in persons in whom the deafness had been of many years' duration—one, for example, thirty years, and also in cases where the existence of the malady could be traced to the eruptive fevers of childhood. In instances of deafness caused by inflammation, followed first by suppuration, and then by a horny, dry condition of the auditory canal, the application of glycerine has been attended with signal advantage. Equally marked and peculiar is the success when it is used in cases where there is a partial or total absence of ceruminous secretion. In many instances of deafness belonging to these classes of cases, the employment of glycerine has been followed by a perfect restoration of the power of hearing. In other examples of deafness, where the membrana tympani had evidently become thickened and hardened, and on examination with the speculum, denoted a whitish or pearly appearance, the use of the glycerine was followed by strikingly beneficial and gratifying effects. It is evident, therefore, that the application of glycerine is equally admissible, whether the tympanum be in a sound state, or whether it has been destroyed by ulceration.

A description of the composition and properties of glycerine, abridged from Turner's "Elements of Chemistry," may not be uninteresting on this occasion.

Glycerine was discovered by Scheele, and Chevreul proved its exact composition and constitution. Its formula is $C_6H_7O_5 + aq.$ It is found in fatty oils combined with oleic, stearic, and margaric acids; its specific gravity is 1.252. Glycerine is a syrupy liquid, miscible both with alcohol and water, insoluble in ether, slightly inflammable, inodorous, and of a sweet taste.

The most convenient mode of preparing it is by the saponification of olive oil, by means of litharge and a little water. Sulphuric acid will separate the oily matters, leaving an aqueous solution containing the alkaline salt along with the glycerine. The mixture is evaporated to dryness, and treated with alcohol, which again dissolves the glycerine, and leaves the alkaline sulphate undissolved. The glycerine may be purified from oxide of lead, by passing through it a current of sulphuretted hydrogen.

Abstracts of Reports of Cases treated with Glycerine.

Miss B——, aged nineteen; Lambeth; is healthy; has been deaf fifteen years. August 7th. This was a favorable case for the glycerine. Membrana tympani sound in both ears. The meatus externus of each ear is quite dry. A "singing noise" in both ears is continually present. Has been deaf since she had scarlet fever, fifteen years ago. The

auditory passages are tender to the touch, and the lining membrane appears unusually white, and the meatus very small. The ears were washed and dried, and the external meatus well covered with the glycerine, which proved eminently successful. In a few minutes, to the great astonishment of her parent, she could hear a whisper. She applied again on the following Monday, and then stated, apparently with great joy, that she had been to church the day previous, and had heard the voice of the clergymen for the first time in her life. In this case the glycerine was applied three times a week for six weeks; after that period it was no longer needed. A cure had been effected, and the ceruminous secretion restored. No return of the deafness has occurred.

Miss H——, Coppice-row, Clerkenwell, aged twenty years, applied to me on the 7th of August. Has good health; states that at the age of twelve years she had measles, and has been deaf to a distressing degree ever since that time. A discharge flowed from both ears during the attack of measles; when it ceased, the deafness became extreme, and when I first saw her it had continued eight years. On examination, the lining membrane of both ears was found to be hard and dry. The tympanum of each ear was sound; there was no ceruminous secretion. She states, that after washing her ear she can frequently hear better for a short time; but so soon as the organs become dry the hearing is lost. In order to make her hear at all, the voice must be raised to a very high tone indeed. On the first application of the remedy, the improvement was very marked in both ears. In six weeks she discontinued her visits, having previously stated that she was perfectly cured. I saw this patient only a few days since; she still hears well.

C. A——, nineteen years of age. August 9. This patient was sent to me by Mr. Weedon Cooke. He is a scrofulous, unhealthy-looking lad. He says, that when he was five years old he had scarlet fever, and soon after a slight discharge flowed from his ears. His mother states that this discharge was highly offensive; at that time there was very slight deafness. This discharge continued, varying in quantity, for six months, when it ceased, and the patient then became deaf in both ears, and the deafness has continued ever since. On examination, the membrana tympani was found to be sound in each ear, but the lining membrane of the external meatus was much thickened, hard, and of a whitish appearance. Never remembers having had any "wax" in his ears. I stated to the medical gentlemen who were present, that I considered this to be a favorable case for the glycerine. Having prepared the aural canals, as in the other cases, the glycerine was applied, the power of hearing being extraordinarily increased. The glycerine was used many times, and always with the same successful result. When the ears are under the influence of glycerine, the patient can hear when he is addressed in an under tone of voice. But I am doubtful whether a complete cure will be effected in this case.

E. M——, Dean street. Aug. 15. Aged nine years, deaf and dumb. This child, the father said, had never been known to hear, and he believed if a pistol were to be fired near his ear, he would not take the slightest notice of it. The ears are very small. Upon examination with the

speculum auris, the membrana tympani was found quite normal. The throat is well formed. The tonsils and uvula, in situation and size, are quite natural. The ears were well saturated with the glycerine. The hearing was then tested in the presence of Mr. Whidburn, Mr. Robinson, Mr. Moorhouse, and other medical gentlemen. His name was called loudly behind him; he turned his head at each call; we then directed him to signify with his fingers the number of times he was called by his father, who was situated at the other end of the room. That the boy heard was apparent to all present, by the accuracy with which he answered by means of signals. I saw this child several times, but we could not improve at all upon the benefit he received from our first operation. His parents have, however, commenced teaching him words. I have not seen anything of the child for some time. It is certain that he received a certain amount of benefit from the glycerine.

Miss R——, Chad's-place, Gray's-inn-road; aged eighteen years. August 15th, 1848. Is not enjoying good health; has been deaf from infancy, in both ears. The malady followed an attack of small-pox. The lining membrane of both ears is pale, hard, and unyielding to the touch of an instrument. The tympanum of each ear appears perfect; she never found any secretion in either ear; had consulted several surgeons, who had applied blisters, essential oils, &c., but without the slightest benefit. She was sent to me by Mr. Jackson. The ears were carefully cleaned by means of cotton held within the blades of a pair of forceps, and dipped frequently in warm water. The canals were then rubbed with dry cotton, held in a like manner. Then the glycerine was applied by the same means, the cotton, well soaked in it, having been repeatedly passed backwards and forwards in each external meatus, care having been taken to apply it to the tympanum. The effect was particularly well-marked. This patient was under treatment for two months—a complete cure was effected. I heard of her a few days since, and her mother says she continues to hear perfectly.

E. P——. Aug. 16 Sent to me by Mr. Robinson, of Gower-street. Aged fourteen. Her mother cannot date her deafness to any cause; states that she has gone through the routine of children's diseases; does not recollect whether deafness followed closely upon any fever; states that she is so deaf, that she is quite useless for domestic purposes, and that she had been under treatment by many surgeons, no benefit following. The ears were quite dry; upon washing them, numbers of scales of the epidermis came away, and upon inquiry, she states that "scurf" frequently comes out of her ears; she can always hear better after washing them. From these facts, it is quite evident that deafness was, to a certain degree, due to a deficiency of the ceruminous secretion. The glycerine was applied in the usual manner. Almost immediately, she heard the tick of a small Geneva watch quite distinctly. The glycerine was used during six weeks, and a complete cure was accomplished.

Miss J. M——, Devonshire-street, Mile-end. August 20. Has been deaf in both ears during the last five years. Cannot trace the deafness to any particular cause. There has not been any discharge. There is constantly an uneasy sensation in the ears. Membrana tympani imperforate. Not any secretion in either ear. On applying the glycerine, she heard a

watch tick with both ears. In this case the patient cannot hear without using the glycerine. The condition of this patient remains stationary.

Mrs. D——, aged forty-eight, White Horse-lane, Stepney. September 3d. Is very healthy; sanguine temperament. States that for forty years she has been almost deaf in the right ear, from the effects of a blow given by her school-mistress. She can hear slightly in the left ear, but is constantly annoyed by a singing noise, and sometimes there is a dull pain over the mastoid process. She has not had fever. There has not been any discharge from the ears, except just after the time when the blow was inflicted, when there flowed a thin fluid from the right ear for about three months. When the discharge ceased, the deafness commenced, and has continued from that period. Upon examining the membrana tympani of the affected ear, no lesion in it could be discovered. The canal of the left ear was quite dry, and without any secretion. She states she can hear with both ears better in wet weather. Upon the application of the glycerine in the usual way, she heard the tick of a watch with both ears, but most distinctly with the right. Previously this had been the deaf ear. The glycerine has been repeated many times, and its use is still continued with the same success. This case was one of the most interesting that I have seen.

Mrs. P. O——, Adelaide-terrace, Islington, aged fifty-six years. September 3, 1848. Has been deaf thirty years; dates the malady from a very severe attack of rheumatism in the head. The meatus of each ear is exceedingly hard, and the membrana tympani much thickened, and of a pearly whiteness; not the least secretion. The membrana tympani cannot be touched without causing pain to the patient; many means of relief had been tried, but without effecting any improvement.

The auditory canals were carefully washed and dried, and then coated with glycerine by means of a camel-hair brush. An improvement in the state of the patient's hearing was very soon manifested. Her son, who accompanied her, said, that for years it was painful to converse with her. Knowing how great was her defect of hearing, she seldom attempted to provoke conversation.

When the glycerine had been introduced a few minutes, her son addressed her in an ordinary manner, and to his astonishment she heard him perfectly. In a few days afterwards she could hear carriages distinctly, and the noise made by the wheels passing over the stones was painfully unpleasant to the newly-excited organ. She also heard thunder distinctly, not having previously heard it for thirty years. The glycerine still acts effectually; but when her ears are not under its influence, she is as deaf as ever. The hearing continues distinct by applying the glycerine twice a week. If she removes the glycerine, and renders the auditory passages dry, the patient becomes quite deaf. The relief obtained while the ears are under the influence of glycerine is very great—an interesting fact, when it is recollected that the deafness of the patient had been of thirty years duration.

M. T——, Tottenham-court-road, has been deaf eight years. Sept. 4th, 1848. He cannot refer its existence to any precise cause. The aural canals are quite dry; the meatus is very large, and the membrana tympani is very easily seen, and found to be quite sound. This patient

states that he is in the habit of moistening his ears frequently during the day, always hearing immediately after. From this statement, the success of the glycerine promised to be certain. Not having any glycerine by me at the time, I merely moistened the ears with water, when the hearing was immediately much improved. I then carefully dried both ears, and the power of hearing again relapsed to its former low degree. On the following morning the patient again attended, the glycerine was applied, and the effect produced was even greater than had been anticipated. The patient always receives the same amount of benefit from the glycerine, and the force of its action is as evident now as when it was first used. The beneficial effects produced by each application of the glycerine continue for six days. I do not believe that any cure will be effected in this case, as it is probable he will always be obliged to use the glycerine.

Mrs. S——, Greenwich, aged thirty-eight years. Dec. 15th. Considers her deafness to have been caused by a descent in a diving-bell; she is deaf in both ears, which presented the same appearance in such cases. The aural canals are hard, polished, and dry; she is so exceedingly deaf that the tone of the voice must be very considerably raised to make her understand. After the glycerine had been applied, she conversed with the friend who brought her in a tone of voice ordinarily used in common conversation. This was a very marked and successful case.—*London Lancet.*

OBSTETRICS.

A Sarcomatous Tumor, containing Hair and Stearine, removed from the Womb.—By GUNNING S. BEDFORD, M. D., Professor of Midwifery, and Diseases of Women and Children, in the University of New York. —On Wednesday the 7th of April, 1847, Mr. D. called at my office, at 4 o'clock, P. M., and requested me to pay a professional visit to his wife. She had been attended for seven weeks by two professional gentlemen who, on the Sunday before I saw her, had voluntarily withdrawn their attendance, under the conviction that her case was beyond remedy, and with the opinion fully expressed to Mr. D. and his friends, that, in all probability, she would survive but a few hours. The husband, in his interview with me, spoke kindly of the physicians, and remarked that he was without the slightest hope, he and his friends having watched with the suffering patient the two previous nights, expecting her death at any moment. With such a representation of the case, I frankly told the husband I thought a visit from me useless, but if it would afford him any gratification I would cheerfully accompany him. He repeated his desire that I should see his wife; and, on being introduced into her chamber I found her lying on her back, her face pale and emaciated, with every indication of excessive prostration; the expression of her countenance, too, gave evidence of great suffering. Her pulse was thready, and beat 120 to the minute. Such was her exhaustion, that, when I addressed a question to her, it became necessary for me to place my ear close to her lips to distinguish her answer, and then

her articulation was almost inaudible. In fact the appearance of the patient was that of a dying woman. Her respiration was labored, and the abdomen as much distended as is usual at the end of the ninth month of gestation. On percussing the abdomen I distinctly recognised fluctuation; and in attempting to introduce my finger into the vagina, with a view, if possible, of ascertaining the character of the enlargement, I felt at the opening of the vulva a soft, elastic tumor projecting through the mouth of the womb, which was dilated to the size of a dollar piece. The parietes of the mouth of the womb thus dilated were extremely attenuated, and did not appear to be thicker than ordinary writing paper. I found no difficulty in introducing my finger between the tumor and internal surface of the cervix, the adhesion being so delicate as to yield to the slightest effort. I satisfied myself that there was no action in the womb; the patient had not experienced anything like labor pains, and the dilatation of the cervix was the result merely of mechanical pressure produced by the tumor within the uterus. Whilst pressing gently with my finger on the tumor as it presented at the mouth of the womb, and grasping with the other hand the abdominal enlargement, I could again distinctly feel fluctuation, and found also that I distinctly comprehended the tumor between my two hands thus applied. Again, in placing my finger on the outer portion of the posterior lip of the uterus, and seizing with the other hand the upper surface of the tumor through the abdominal walls, alternately elevating and depressing the two hands, it was evident that I embraced the womb itself, which was immensely distended by the growth of the tumor. In making an examination *per rectum*, I could without difficulty detect the enlarged uterus. These circumstances, together with the important fact that the abdominal enlargement was uniform on its surface, possessing nothing of the features usually attending extra-uterine growths, such as ovarian and fibrous tumors, etc., caused me to arrive at the conclusion that, in the present case, the tumor was exclusively *intra-uterine*. It will be perceived that on this decision depended the remote hope of giving to my suffering and almost dying patient, even temporary relief from her agony. Having, therefore, formed my opinion as to the seat of the tumor, and partially as to its nature, I stated to the husband, that, desperate as the case was, and imminently perilous as would of necessity be any attempt to remove the tumor in the exhausted and almost hopeless situation of his wife, yet it was my opinion that the tumor could be removed—although the *serious hazard was that she would sink under the operation*. This opinion was given emphatically, without reserve, and unaccompanied by a word of comment calculated to urge consent to an operation, which presented but little prospect of permanent relief, and could only be justified by the reasonable expectation, that if the patient should survive the removal of the tumor, her suffering would be mitigated, and her progress to the grave rendered comparatively comfortable. The opinion was communicated to the patient by her husband, and she expressed an ardent desire that the operation should be performed without delay, remarking that she was prepared to encounter every thing, even death itself, with the remote hope of temporary relief from the agony occasioned by the pressure of

the tumor. The husband and friends acquiescing fully in this appeal of the suffering patient, I left the house, promising to return in half an hour and perform the operation. On my return I was accompanied by my friend, Dr. Detmold, and two of my pupils, Messrs. Burgess and Woodcock.

These gentlemen heard with me the following particulars of the case as related by the husband and sister of the patient: Mrs. D. was 47 years of age, and married in 1832. Soon after her marriage she was attacked with cholera; and during her convalescence from this disease, she miscarried. Her health had been more or less infirm for the last ten years. Her menstrual periods had always been regular, with the exception last year, during which time they occurred about once in two or three months, and then not freely. This she imputed to *change of life*, and the circumstance did not attract any particular attention. Her abdomen had begun to enlarge in July, 1846, and continued to do so unto the present time. In January last, she suffered greatly from distention of the bladder, and could not void her urine except in small quantities at a time, accompanied by excessive pain. For this she consulted a medical man, who found it necessary to introduce the catheter, from time to time, to relieve the bladder. She commenced as early as January to be constipated, and defecation was attended with excruciating suffering. These difficulties about the bladder and bowels continued to increase, and for weeks before I saw her, she repeatedly passed over ten days without an evacuation—medicines having no effect, and injections per rectum immediately returning, without bringing away any fecal matter. Her urine was voided in very small quantities, not more than two table-spoonfuls at a time, and it was nearly the color of blood. It was impossible for her to evacuate the bladder except when resting upon her elbows and knees; this position, however, occasioned so much fatigue, that, in her present exhausted condition, she could not avail herself of it. In a word, the agony of this unhappy sufferer was induced almost entirely by the pain consequent upon the attempt to evacuate either the bladder or rectum. With these facts before me, together with a knowledge of the position and bearings of the tumor, it was not difficult to arrive at the important conclusion that the pain and distress in the bladder and rectum were due to *mechanical pressure of the intra-uterine growth*. At my request, Dr. Detmold examined the patient; and, in view of all the circumstances of the case, concurred with me in opinion that *without an operation, she could survive but a few hours; whilst, if she did not sink under the attempt to remove the tumor, her distress would be sensibly palliated, and her life possibly prolonged*.

With the understanding, therefore, of the uncertainty and immediate danger of the operation—an understanding fully appreciated by the patient and her friends—I proceeded to remove the tumor in the following manner:—A mattress was arranged on the table, and Mrs. D. placed on her back, her hips being brought to the edge of the mattress, the thighs flexed on the pelvis, and an assistant on either side to support the feet and limbs. I then introduced the index finger of the right hand into the womb, steadying the tumor with the other hand applied to the

abdomen, and succeeded in directing my finger its full length between the tumor and cervix of the uterus; this was done with great caution, for the parietes of the cervix were so extremely thin, that indiscreet manipulation would almost certainly have produced rupture of the womb. With the view, therefore, of preventing such a result, I thought it more desirable to break up the adhesions of the tumor simply with the finger than incur the hazard of introducing instruments into the uterine cavity. In proportion as the adhesions yielded, I grasped the tumor; and, without much effort, was enabled to remove it with my hands in fragments. Having brought away in this manner all the solid portions of the tumor, and carrying my hand well into the cavity of the womb, I distinctly felt a sac pressing, as it were against my finger. This I immediately ruptured, and there escaped by measurement three quarts of fluid, which resembled in all its physical qualities, with the exception of the smell, pure pus. This fluid was collected in a vase as it passed from the womb, and, half an hour afterwards, on examining it, we found it no longer liquid, but presenting a solid mass, precisely like *hardened lard*. It was evident, therefore, that the temperature of the body kept this substance in a fluid state. As soon as the fluid had escaped, I introduced my hand still higher up, and felt something resembling in touch, human hair. It was, in fact, *a large mass of human hair matted together*, with no other vestige of an embryo—there was no trace of scalp, or anything else save the hair. I grasped this body, and removed it from the womb entire, it being so compact as not to separate in fragments. The womb, thus freed of its contents, contracted; and there was no loss of blood. After the solid parts of the tumor had been removed, there escaped from the bladder an incredible quantity of high-colored urine, which gave such relief to the patient, that it caused her to exclaim, in simple, yet emphatic language, “Doctor, I am in Heaven!” It may here be asked, why the catheter had not been introduced before commencing the operation. In answer, I would merely remark, that every proper attempt had been made to effect this desirable object; but it was found physically impossible, without inflicting serious injury on the patient, from the pressure of the tumor on the neck of this organ.

Mrs. D. bore the operation with a heroism which greatly surprised us; and although it became necessary to suspend occasionally all manipulation to rally her from fainting, which occurred three different times; yet, considering her extreme prostration, it may well be deemed a matter of amazement that she did not sink. The operation being completed, the patient was placed comfortably in her bed. In the course of half an hour, her breathing became easy, the pulse fell ten beats in the minute, and there was an expression of composure about the countenance, which gave sincere joy to all of us, feeling as we did an intense and unaffected anxiety as to the immediate issue of the case. Without the aid of an anodyne, she fell into a sleep, which lasted six hours, the first repose she had enjoyed for many long nights of agony. When she awoke, she appeared greatly refreshed, and though extremely prostrated she seemed to take pleasure in gazing on her friends, to each of whom she gave a look of recognition. On the morning after the operation, her bowels were spontaneously and freely moved, a large quantity of hard

faecal matter passing away. Subsequently, simple injections of warm water sufficed to afford her a daily evacuation, and the urine was discharged freely and without obstruction. Mrs. D. continued to improve in appetite, digestion and strength, and although her friends were admonished not to be too sanguine as to her recovery, yet they regarded the fear of any other issue as utterly groundless. On the 22d of April, fifteen days after the operation, she began to fail; and in defiance of every thing which could be brought to bear upon her case, she continued to sink, and expired on the 25th of April, having survived the operation eighteen days.

I have no doubt the anomalous mass found in the womb of this patient, was the product of a *blighted ovum*, and it may be reasonably asked whether her chances of recovery would not have been enhanced, if the tumor had been removed at an earlier period, before the powers of the system had become exhausted by long-continued and uninterrupted suffering. The adhesions, it will be remembered, of the shapeless mass to the internal surface of the womb were slight. The stearine, which escaped after the sac was punctured, I regard as nothing more than the fetal brain and other fatty portions of the system in solution. These circumstances together with the quantity of human hair removed from the womb, and the fact that the tumor was comparatively of rapid growth, are, in my judgment, strong proof of previous conception.

I cannot conclude this paper without returning my thanks to Dr. Detmold, for his prompt and efficient aid, not only during the operation, but also in the subsequent attendance. My pupils, Messrs. Burgess and Woodcock, are also entitled to the highest commendation. Throughout the case they exhibited a zeal worthy of the profession and which may be looked upon as an index of their future success.—*N. Y. Journ. of Med.*

Chloroform in Natural Labor. By R. P. STEVENS, M. D., of Ceres, Pennsylvania.—CASE 1.—Mrs. B. ætat. 50, primipara. She had been in labour twelve hours when I was called. By examination the os was found to be dilated to the size of a two shilling piece. It had a firm fleshy feeling, and was not easily dilated. Pains were regular but very forcing. Patient of a nervous temperament, fleshy, rosy cheeks, and in high health. In four hours the os had become sufficiently dilated for the head to be distinctly felt and exploration had. The sutures were closed, and fontanelles bony. Head was large. Pains now became very forcing, attended with great effort in bearing down. At the end of six hours from my arrival the os was sufficiently dilated for the head to pass. Great efforts made for expelling the fetus, attended with excruciating pains, and the patient piercing our ears and hearts with her cry of agony. Pulse 120, sharp and spiteful. Little progress made in breaking up the head, and passing the superior strait. At this stage I administered 15 drops of chloroform on a folded napkin. In the midst of one of her most agonizing cries, while all the attendants were bathed in tears of sympathy she sank back upon her back, in a sound sweet sleep, from which, after a few minutes, she awoke, exclaim-

ing "this is bliss, this is bliss." Pulse fell from 120 to 75 or 80 beats in the minute, and was soft and easily compressed.

The administration of ten drops of chloroform every half hour kept her in the anæsthetic state, perfectly unconscious of pain or suffering three hours, until the head was broken down and had passed the superior strait and was engaged in the inferior. Voluntary effort being suspended by the action of the chloroform, I ceased administering in full and regular doses. It was only when she was exhausted by her efforts, (which were deemed necessary) that the chloroform was given in full doses, she would then enjoy a brief season of repose, the pains still progressing but unfelt, and awoke to consciousness with renewed strength and courage for her maternal task. Seven hours she was under the influence of this anæsthetic agent, with the most happy effect. The pulse never rose above 80 after the first dose. Her recovery was rapid, and without any drawback, much more rapid than I had ever seen before, after so severe and protracted labor.

The husband hastened to make the amende d'or.

CASE 2.—Mrs. W., ætat. 19, primipara. Had been in labor 24 hours, a midwife being in attendance. Her cries were heard by me before reaching the house, the distance of half a mile.

On examination the left ear was found presenting, the head lying across the superior strait. The patient was making great efforts, and her cries were loud and piercing, her eye balls seeming to start from their sockets, and the veins of the forehead and temples swelling as if about to burst.

After putting the head in a favorable position I listened to her pressing cries for chloroform, I gave her 30 drops upon a folded napkin, which in the midst of one of her most distressing pains put her into a quiet sleep, which lasted 15 minutes. On awaking she said she had had the first quiet rest in three days, and enjoyed the most pleasing dreams.

10 to 15 drops were administered at intervals of 20 minutes or half an hour, just enough to keep her sufficiently under its influence to make her pains endurable and not suspend voluntary efforts, until the last few expulsive pains, when she was put under its full influence, and she gave birth to a fine large boy, weighing 9 lbs., undressed, wholly unconscious of suffering. She expressed herself as if having been engaged in a great effort. Her recovery was as rapid as case first.

CASE 3.—Mrs. —, ætat 40, sixth child. Her pains were not regular, frequently shifting, sometimes to the head, more frequently to the stomach, and occasionally between the shoulders. I deferred the use of chloroform until the os should become fully dilated, and the pains more regular. When this had taken place her labor pangs became "*unbearable, I would kill her,*" she said; she begged for chloroform. I exhibited 10 drops which quieted her immediately. With frequent repetitions of 5 drops, she was kept in a perfect anæsthetic state until the child was born, being entirely unconscious when it passed the external orifice. Her pulse sank from 100 to 45, under the influence of the chloroform, and continued at this low point until a half hour from the birth of her babe; it then rose slowly to her healthy standard. I

remark here, that, in the complete anæsthetic stage, she was capable at each pain of voluntary effort. Her recovery was more rapid and favorable than any of her previous confinements. She had no after pains, though previously suffering severely from them, fully equal, she said, to her true labor pains. She expressed much gratitude to me for the use of a remedy which made the hours of maternity endurable, and this anticipation pleasant.

CASE 4.—Mrs. S——, ætat. 22, primipara. Premature labor at the eighth month. Breech presentation and delivery. Had been in labor 18 hours, when the os was fully dilated, but the vagina, perineum and vulva still rigid. In fact, had not begun to dilate, but was constricted, hot and dry. Pulse 120 sharp and irritable. Pains severe, forcing, occurring every ten minutes, and attended with great efforts of expulsion. Her mind was anxious for her own safety, and that of the child, and dsepairing of all hope. In previous cases of the like symptoms I bled ad deliquium animi. In this I resolved to try the chloroform; and, though the patient was much opposed, I exhibited ten drops, with the happy effect of quieting all her cries, inducing sweet and refreshing sleep, and giving hope and courage. Pulse sank to 60, and was full and soft. For three hours she was kept under the gentle influence of chloroform, giving tokens of pain only by a slight movement of the corrugator muscles of the forehead. During all this time she was conscious of what was doing in her room, of the movements of all around her, could answer questions, and wished I would put her into a perfect sleep. Cloths wrung out of hot water were kept continually upon the soft parts. At the expiration of three hours the soft parts being sufficiently dilated, the dose of chloroform was reduced, sufficiently to allow of voluntary effort, (for it had interrupted all power of aiding,) and in forty minutes she was safely delivered of a living child, quite to my surprise, having been so long in labor, with this presentation.

She expressed herself as having had the most delightful dreams, the particulars of which she could have recollected, if I had given her enough. Her recovery was rapid, and unattended with any unpleasant symptom.

I remark here, that I was as much surprised at the charming power of this agent, as I have ever been when following the advice of the late Prof. Dewees, I have bled to fainting, and seen the most unpromising cases yield to this heroic remedy. The sequelæ of the one, however, is far different from the other. After the latter, we often have to contend with all the protean symptoms of impoverished blood; while in the former, fresh air rapidly renewed the vitiated blood, and in a few hours, at the farthest, no trace of the potent agency we have been using can be found.

CASE 5.—Mrs. L——, ætat. 24, second child, premature labor at the 7th month. Breech delivery, child stillborn, appeared to have been dead some days. The history of this case is so nearly that of No. 4, that that will suffice for this.—*Ibid.*